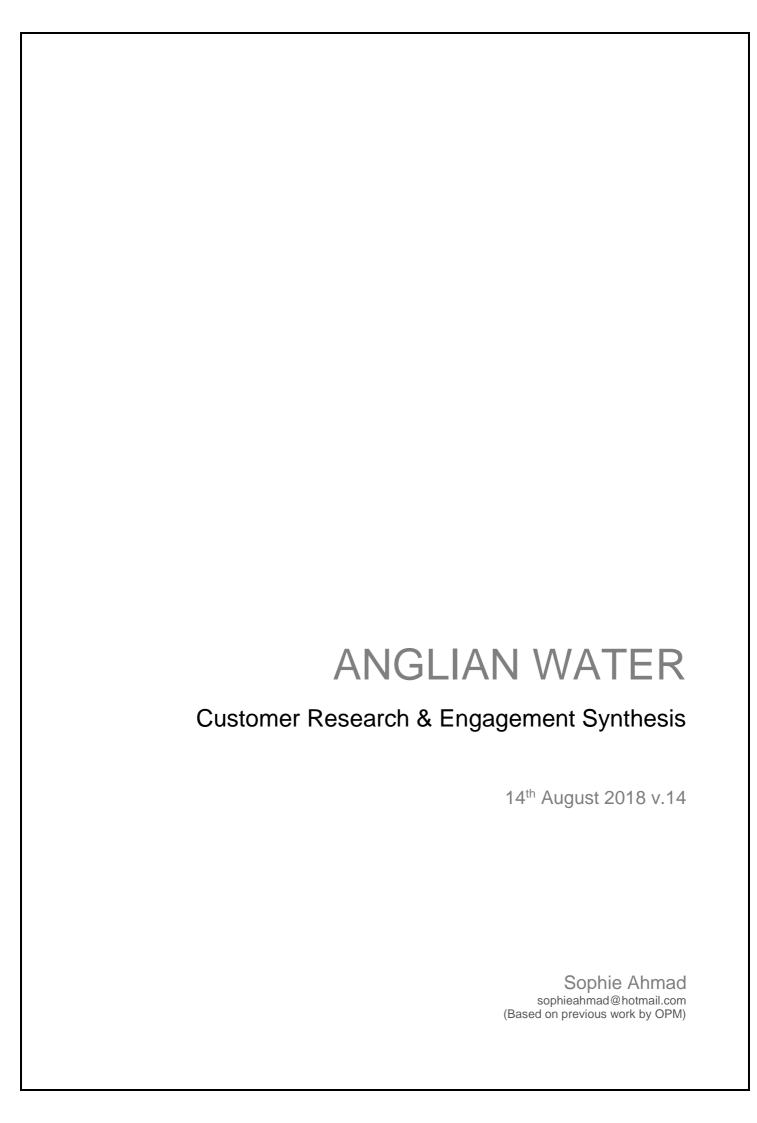
12C. ANGLIAN WATER CUSTOMER RESEARCH AND ENGAGEMENT SYNTHESIS











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1. Introduction

Overview

Background to customer and stakeholder engagement

In the run up to the last price review, in 2014 (PR14), Anglian Water commissioned a large programme of customer and stakeholder research and engagement, which also informed the company's longer-term business planning process.

The programme explored the views of household, business, and future customers, as well as important partners and regional stakeholders. It comprised a large number of research projects, ranging from exploratory qualitative studies involving a small number of customers to complex, quantitative studies involving large and representative samples. It also involved gathering customer and stakeholder views through a range of engagement activities, designed to maximise participation in debates about the company's current and future services. In addition, the company continued to collect customer feedback through existing channels, for example through the complaints process.

A synthesis of the findings from this programme was compiled by the Office of Public Management (OPM), who helped to design the research and engagement process for PR14 and also carried out a number of research and engagement activities. As the aspiration coming out of PR14 was to create a "live" evidence base about customer and stakeholder views, the synthesis was updated periodically, to June 2016, to reflect new evidence as it became available.

Current phase of customer and stakeholder engagement

In the Autumn of 2016, Anglian Water began a process to refresh its overall customer and stakeholder engagement strategy and plans, with support from Given London. This process placed greater emphasis on:

- Co-creating the new engagement strategy and plans with customers, partners and staff. This has involved exploring the language, concepts and activities that will resonate with different audiences and help to ensure their participation is maximised.
- Understanding the world from customers' point of view. Before honing in on what matters most to the company, there has been a focus on understanding customers' lives and what matters to them, in order to contextualise and make sense of their responses.
- Understanding differences of opinion, experience and behaviours across the customer base.
 Investment in segmentation research has helped to illuminate important differences between customer groups and inform tailored approaches to on-going communication and engagement.
- Understanding the specific circumstances and support needs of customers in vulnerable situations, in line with Ofwat's PR19 guidance. This has involved investigation of the definitions and dimensions of vulnerability.
- Creating a two-way dialogue with customers. Investment in social media activity has enabled customers to participate in a more open conversation with the company.

A new wave of research and engagement activity, commissioned under the refreshed strategy, has been taking place from January 2017.

About this synthesis report

This report provides a rolling synthesis of the new sources of evidence that have been commissioned under the current customer research and engagement strategy. It sets findings from new evidence sources against those from the existing evidence base, in order to help identify where newer sources may confirm existing analysis, potentially conflict with it, or add new insights in areas not previously covered. The report will be regularly updated as new findings are made available.

The report has been written by an independent consultant. It is designed to inform Anglian Water's Board and the nine portfolio teams charged with writing different elements of the business plan. It also provides evidence to inform the company's auditors and members of the Customer Engagement Forum (CEF), who will need to be assured that customer views have been taken into account in the planning process. The report may also be of interest to customers and stakeholders who want to find out more about the results of research and engagement activities.

In response to feedback on the original synthesis, this document identifies which messages are particularly relevant to each of the business plan portfolios, in order to try to ensure a clearer link between customer views and propositions set out in the business plan.

Synthesis process

Guidance on the process

For PR19, much greater emphasis has been placed on "triangulating" different sources of evidence on customers' and stakeholders' views and experiences. A recent report commissioned by the Consumer Council for Water from ICF¹ defines triangulation as the use of "multiple and independent measures" to improve the certainty of conclusions about a hypothesis under investigation.

The ICF report identifies various different types of triangulation, including: methodological triangulation (combining two or more methods to gather evidence on the same subject); data/source triangulation (collecting data using the same method but from different sources); temporal triangulation (collecting data over time in order to identify how external influences shape findings); geographical triangulation (collecting evidence in different locations to compare findings across groups); investigator triangulation (using different research teams to gather evidence on the same topic); and theoretical triangulation (drawing on different conceptual frameworks and theories to interpret findings). The report is clear that triangulation should be built into companies' customer research and engagement programmes at every stage, from reviewing the existing evidence base and identifying research objectives and hypotheses, to planning and carrying out new research, and making sense of findings.

The ICF report acknowledges the challenges involved in weighing up evidence from a variety of sources and comparing and contrasting findings. It sets out some helpful principles to inform this process, adapted from the Cabinet Office's guidance on qualitative evaluation². These include ensuring that evidence:

contributes to water companies' understanding of their customers' priorities, needs and values.
 This involves overcoming confirmation bias (whereby sources are favoured that agree with an already established hypothesis), by encouraging a wider assessment of what can be learned

¹ Defining and applying "triangulation" in the water sector: How water companies can use different sources of customer evidence in business planning, ICF, July 2017. Drawing on a definition set out in Farquhar J. and Michels N. (2016), "Triangulation without Tears: Marketing Challenges in a Turbulent Business Environment", in (eds) Groza M. and Ragland C., Springer, Heidelberg, pp.325-330.

² Cabinet Office (2003), Quality in qualitative evaluation: a framework for assessing research evidence.

from each source, taking due account of the context in which research has been produced, and widening the types of information considered;

- is methodologically sound, and generated using methods that have been soundly applied;
- relies on data that has been rigorously gathered, in line with best practice; and
- has been interpreted in a credible way, allowing for sufficient exploration of alternative interpretations, and being clear about potential sources of bias.

Overview of the steps involved in producing this report

The process of producing this synthesis report closely mirrors the approach taken to the synthesis report produced for PR14. As was the case for the previous synthesis, the report is structured around Anglian Water's 10 customer outcomes, and associated sub themes (for reasons explained in more detail below). While work on this synthesis report began before publication of the ICF's guidance on triangulation, the process that has been followed reflects many of the key principles set out in that report.

The following steps were involved in producing the synthesis:

- 1. Each new evidence source was read once in full, in order to gain an overview of the content and the themes covered, the type of data and evidence the source draws on, and the style and approach used by the report authors to write up their findings.
- 2. The source was then read a second time, and relevant sections of text were extracted and summarised into grids in a separate appendix document (organised by outcome and subtheme). Page references to the original documents were included in the grids to allow the synthesis author and any interested reader to refer back to these for further information, or to check the analysis set out in this report. Sources were also categorised, depending on the type of evidence they draw upon, as a very approximate guide to the author and the reader about the weight to be given to each in the analysis (see below for more details).
- 3. The headline points relating to each outcome and subtheme that emerged from the previous synthesis were transferred into tables at the start of every section in the appendix grids. On a rolling basis, new evidence was analysed against these headline points, identifying areas of possible consensus, divergence, and any new insights. New headline points were added to the tables as they emerged, and subsequent sources were also analysed against these.
- 4. Findings from the original synthesis report were then transferred into a new report template. A separate section was created under each outcome and subtheme for new messages emerging from Autumn 2016 onwards. Findings from new sources were summarised there, together with some commentary comparing these to existing findings, where appropriate,³ (see below for more details).
- 5. A high level summary table of the key customer research and engagement messages was then compiled. This has also been updated on a rolling basis. In this summary table, new

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³ The original synthesis document (to June 2016) contained three separate summaries of findings, each with differing levels of detail. As the original aspiration for this report was for the summaries to be linked together (so a reader could choose to read a more or less detailed version of any section of the report), the three original summaries were reviewed alongside each other to ensure the structure and content of each was consistent. In some cases gaps were found, and new text was written from the existing evidence base (to June 2016) to fill these in (this text appears in green in the report). The three levels of summary were then updated with new sources for a period of time, before a decision was made to retain just the most detailed summary, which was considered the most useful by Anglian Water staff. Although the two higher levels of summary have now been excluded from this report, some sections of green text remain.

- evidence from Autumn 2016 on has been included in italics, rather than in a separate section, for reasons of space.
- 6. The high level summary table and main report were then coded by their relevance to different business plan portfolio areas, making it easier for Anglian Water staff and other interested parties to find the relevant sections of text. Clearly, many of the messages from customer and stakeholder engagement are relevant to all parts of the business.

Strengths and limitations of the approach

This report has been written by an independent consultant who was involved in the research and engagement process for PR14 (as a member of the OPM team), but has not been involved in any of the current wave of research and engagement activity, or in detailed discussions with Anglian Water about business planning. This should help to reduce the risk of confirmation bias, whereby sources are selected, or given more weight in the report, as they confirm existing hypotheses or fit with intended plans.

Rather than focusing the analysis in this report around a narrow set of questions or hypotheses, each source of evidence has been reviewed against Anglian Water's broad outcomes-based framework. This should help to ensure the widest possible "assessment of what can be learned from each source", and that the "full value of all information" is maximised, in line with ICF's recommendations.

Apart from attendance at one workshop where research teams presented some of their key findings, the author has relied entirely on reviewing written outputs in producing this synthesis. This means that the author's understanding of the methods employed in each study and the findings is confined to what is specifically described in those outputs. Where reports have been detailed and use of language has been precise, this has made understanding and interpretation easier. In the case of some of the qualitative research, where outputs have been more "high level", this has sometimes been more difficult.

The first set of research and engagement activities conducted under this phase of the engagement strategy were well underway or already complete before the structure for this synthesis report was agreed. As a result, it is possible that research teams collected evidence that was potentially useful for this report (which has a broad focus), but did not report it, as it did not relate to their particular (narrower) research or engagement focus. In a couple of instances, additional material has been requested of research teams where the report author or Anglian Water staff felt this would add to the evidence base set out in this report. For transparency, any additional evidence has been saved as a separate document and is included in the list of sources (below).

The author has not carried out any independent verification of the quality of the evidence reviewed for this report; it has been assumed that research teams, as experts in their fields, have followed best practice principles in designing and carrying out their research.

As highlighted above, in order to help reduce the risk of bias, the appendix for this report categorises evidence sources on the basis of the methodology employed (see the section below for more details). This categorisation is designed to help the author and the reader to make some judgements about the weight to be given to particular sources of evidence. However, it is important to emphasise that this is a rather blunt instrument. It does not take into account other important variables, such as quality, or reflect the fact that appropriate standards of robustness will vary, depending on the particular topic and the nature of the decisions at stake. For this reason, categorisation should be treated as guidance rather than prescriptive scoring.

This report has been updated on a rolling basis, as new sources of evidence have become available. This approach has some advantages, not least in allowing timely input into the business plan and other key decisions as they shape up, and helping to identify as early as possible where there may be gaps in the evidence base that need to be filled with new research. However there are also some limitations of such an approach. There is a risk, for example, that views that were in the minority and did not make it into earlier analyses may have reached the threshold for inclusion if later evidence were added from the start. Also, if themes and issues were highlighted in later research, it has not necessarily been feasible to go back over all earlier sources to check if these were also found there. That said, analysing each source in its entirety, and against a broad outcomes-based framework, should minimise the risk of this.

Because of the breadth of the outcomes framework (with multiple subthemes under each outcome), and the rolling nature of this synthesis, it has also not been feasible to produce a full and constantly updated narrative identifying all potential areas of consensus and divergence in the evidence base, and possible reasons for this, for every topic covered. As specific hypotheses and business plan propositions become clearer, it will be important to carry out a more thorough assessment of the evidence base as it relates to these issues, especially where important decisions and large-scale investments are at stake. In doing this, it should become clearer where there may be gaps in the evidence base, where propositions are reliant on just a few sources of data, or where available sources may not be sufficiently robust given the nature of the decisions involved.

As outlined above, in this report, findings from pre June 2016 research have been set alongside newer ones from Autumn 2016 on. In a few cases, it will be possible to compare results over different time periods with a reasonable degree of certainty. However, it is important to note that this will not always be the case as questions, methodologies and context may have changed.

More generally, it is unlikely to be possible to fully "resolve" all discrepancies in findings between sources (either between activities within the current wave of research and engagement, or between this wave and the previous one). However, it is hoped that in providing an overview of the key findings for both periods, this report prompts further questions and discussion about the evidence base and the factors that might explain apparently contradictory findings or shifts in opinion.

Sources

As highlighted above, the appendix for this report categorises evidence sources on the basis of the methodology employed. This categorisation, although imperfect, is designed to help the author and the reader to make some judgements about the weight to be given to particular sources of evidence.

Robust sampled surveys

As outlined in the previous synthesis report, well-designed surveys based on random sampling can generate robust findings that provide insight into the prevalence and distribution of views (or other factors) in the population (within certain bounds of uncertainty). Surveys often require participants to use pre-set or "closed" answer categories that limit their freedom to answer, but aid standardisation and comparability (as well as reducing researcher bias). These sources are coded "1" in the appendix grids. The sources included under this heading include secondary research that draws on data of this kind from other studies.

The new sources of this type that have been reviewed for this report are:

Customer Behavioural Segmentation: research report, Allto Consulting, 7th April 2017.
The purpose of this study was to create a customer segmentation that will enable Anglian Water
to better understand how attitudes towards water, the company, and its impact on the
environment differ across the customer base and how this shapes behaviour. The research also

explored customers' preferences for communication channels with the company and what would motivate them to reduce water consumption. The study involved a representative telephone survey of 1200 domestic customers from around the Anglian Water region, and in Hartlepool. Cluster analysis was used to create six customer segments.

- Customer Segmentation Research: Total Customer Base Results, Allto Consulting, no date. This short report provided aggregate results for the whole customer sample on a small number of questions explored in the segmentation research.
- Acceptability Testing: SDS. Final Results, Accent, July 2017. The purpose of this study was
 to explore customer reactions to Anglian Water's Strategic Direction Statement, and the reasons
 for these reactions. The research explored responses to: the six major challenges facing the
 company; the 10 customer outcomes; the company's seven water quality and customer
 satisfaction goals; and Anglian Water's four stretching, long-term goals. The study involved a
 survey, which reached 1029 household customers (via phone and an online panel) and 498
 non-household customers (via the phone). Quotas were set to try to ensure the overall sample
 was representative of the Anglian and Hartlepool Water regions.
- Anglian Water Community Perception Survey, Allto, August and December 2017. This survey explores customers' awareness of Anglian Water's activities in the community and the environment, and their perceptions of Anglian Water as a company that cares about the communities it serves. The survey was first run in 2015, with four waves of research taking place each year (with final yearly results an aggregation of the four waves). These sources feature results for wave one (August 2017), wave two (October 2017), and wave three (December 2017). Anglian Water's "core" customer base is reached via an online survey. "Vulnerable" customers are reached through a combination of face to face interviews, and a number of responses reallocated from the main online survey post fieldwork. Customers from Hartlepool are included via face to face interviews. Weighting is applied to ensure results are representative of the customer base and local population.
- Community Perceptions Study 2017/18, Allto, 2nd May 2018. This report updates survey findings to provide a complete picture for the whole of 2017/18. The total sample for this year of the survey was 1421. Note, waves three and four of the survey (from December and March) used some "golden questions" to reflect Anglian Water's customer segmentation. The segment split in the sample was broadly in line with the 2017 segmentation study (39% tech savvies, 20% comfortable and caring, 12% eco-economisers, 11% family first, 8% careful budgeters, and 10% protective provincials). Segments scoring particularly highly in these waves of research were flagged in the report.
- Water Resources Second Stage Research: Stated Preference Report, ICS Consulting Ltd and Economics for the Environment Consultancy, Ltd (eftec), October 2017 (v.2). The aim of this study was to support the development of a full set of quantified valuation data that can be used in water resource planning and the development of the PR19 business plan. The study employed a survey-based stated preference approach to explore: customer priorities for water use restriction levels of service; customer priorities for different water resource options; and customer values for estimating the benefit of investments that maintain or improve service levels. The study explored the following restrictions: hosepipe bans; non-essential use bans; rota cuts; and no tap water (standpipes). It explored the following demand-side water resource options: reducing leakage; compulsory and encouraging optional metering; water saving devices; and educating and incentivising water saving. It also explored the following supply-side options: transferring water; desalination; re-use of treated waste-water; building new and extending existing reservoirs; and underground storage. A total of 1008 household and 408 non-

household customers took part in the survey, via online interviews. Quotas were set to ensure respondents were representative of the respective customer base. To prevent cognitive overload with a long survey, a twin-track approach was adopted, with half of (each type of) respondents answering questions on water resource options and the other half on levels of service and drought restrictions. The study featured a comprehensive design and testing phase, as well as post-survey focus groups to validate results. Actual monetary values from the research are not included in this synthesis report, as they are reported elsewhere. Instead this report focuses on more general findings about customers' experiences and preferences.

- Valuation of the impact of roadworks and flooding using the Wellbeing Valuation method, Simetrica, 31st October 2017 (Draft). The aim of this study was to assess the impact of flooding and roadworks on the subjective wellbeing of customers, in order to assist Anglian Water with investment planning and incident mitigation. This was the first time that subjective wellbeing impacts of water-industry related flooding and roadwork incidents have been analysed in the UK. The study uses the Wellbeing Valuation approach, which calculates the value of each type of incident by estimating its impact on subjective wellbeing for individuals who experience these types of incidents. Impact is then converted into a monetary amount, by estimating the equivalent amount of money customers would be willing to pay to avoid each type of incident. (This contrasts with other non-market valuation methods, such as stated preference, which require people to envisage the impact of these factors on their or other people's lives, which they may find difficult, or revealed preference techniques, which require data about people's actual behaviours that may be of limited availability). The research explored the impact on life satisfaction of: all types of flooding incidents recorded by Anglian Water; water flooding; internal (domestic) sewer flooding; external sewer flooding; and roadworks. The analysis is based on data from the Annual Population Survey (from April 2011 to March 2016), a large-scale, UKwide, continuous household survey, which includes information on wellbeing and demographics. Data from the APS relating to Anglian Water customers was merged with information on flooding and roadwork incidents provided by Anglian Water. Survey respondents were classified as potentially affected by a type of incident if it had occurred within a specified distance of their postcode and in a specified time period preceding their survey response. Regression analysis was used to compare the affected group to a control group. (The total sample of customers, both those deemed to be affected and unaffected, was 64,526). As the research controls for a wide range of individual-level characteristics, the differences in subjective wellbeing between the two groups provides a guide to the impact of the incidents. A number of adjustments to the analysis were made to aggregate the valuations to a per-incident level (which can impact on multiple households). Actual monetary values from the research are not included in this synthesis report, as they are reported elsewhere. Instead this report focuses on more general findings.
- Combining Anglian Water's customers' subjective preferences with their willingness to pay for river water improvements, Final report, Centre for Social and Economic Research on the Global Environment, School of Environmental Sciences, University of East Anglia, 22nd February, 2018. This project integrates the results obtained from a "Q methodology" analysis of respondents' subjective preferences for river management and river water quality improvements into a stated preference choice experiment framework. This novel approach aims to help Anglian Water better understand the subjective viewpoints underlying and influencing their customers' choice behaviour and their willingness to pay for river water quality improvements. Q methodology does not rely on mass sampling. Instead, the sample must provide sufficient breadth of opinion. Sixty-two respondents took part in the both the Q methodology and the choice experiment. A further 138 respondents took part in the

experiment only. Respondents participating in the Q methodology included water quality experts (from a range of organisations), recreational users of the river environment (from three local clubs), and members of the public (randomly selected via door to door sampling in a range of areas to provide respondents from different socio-economic backgrounds). Respondents were interviewed at a range of distances from the 20km stretch of the River Yare used in the choice experiment to test the hypothesis that those who live further from the river are less willing to pay for water quality improvements. The Broadland Rivers Catchment was selected as the case study area as it is subject to a diverse range of pressures impacting on river health. Respondents taking part in the Q methodology were asked to sort 36 diverse statements on the subject of river management, providing a picture of the different aspects of each respondent's viewpoint. Completed "Q sorts" were then subjected to factor analysis to identify groups of participants who make sense of, and sort, the statements in significantly similar ways. (The factor analysis took place in two stages to allow any distinctive differences between the viewpoints of different types of respondents to emerge rather than being lost in the aggregrate data set. Confounded and insignificant sorts were excluded from the second stage analysis, creating a final sample of 45). Q results were then combined with choice experiment results. The researchers used a discrete choice experiment and conditional logit modelling to estimate the values the 200 respondents derived from both ecological and recreational attributes of river water quality. Willingness to pay was derived from the marginal change from the respondents' perception of current water quality and a hypothetical future scenario for water quality.

• PR19 Main Stage Willingness to Pay Study, Anglian Water: Final Report v.2, Eftec and ICS Consulting, February 2018. This research explores customer priorities for a key set of water, sewerage, and environmental service areas: unplanned interruptions; severe water restrictions (rota cuts); discolouration; leakage; sewer flooding inside properties; sewer flooding to external areas; odour from sewerage treatment; bathing water quality at beaches; river water quality; pollution incidents; and customer service. The study quantifies the importance and priority that household and non-household customers place on maintaining and improving these services. This includes a set of valuations that measure the benefits to customers of changes in service levels. The research uses a stated preference survey approach. Two versions of the survey were developed in parallel: the first builds on the approach Anglian Water employed for PR14 and utilises a discrete choice experience (DCE) approach; the second trials an alternative best-worst scaling (BWS) approach. The two approaches produce complementary results that can be used to cross-check and validate customer priorities and valuations. Before completing the choice task, customers taking both versions of the survey were asked about their experiences of Anglian Water's services. After completing the choice task, they were asked about the motivations for their responses, and some additional questions on the issue of intergenerational equity. Considerable emphasis was placed on designing and piloting the survey to ensure it was easily understandable by participtants and generated valid results. The fieldwork took place between October and December 2017. Across both versions of the survey, 1353 household customers took part (900 DCE respondents and 453 BWS respondents) and 500 non-household customers (DCE only). A combination of face-to-face and online interviews were conducted with household customers. On-line interviews were conducted with non-household customers. The household sample included sub samples for combined water and sewerage customers, sewerage only customers (Essex & Suffolk Water, Affinity Water, and Cambridge Water), and water only customers (in Hartlepool). The non-household customer sample included combined water and sewerage customers and sewerage only customers. The overall sample and each sub sample was broadly representative of the Anglian Water customer base (by age, gender, socio-economic group and ethnicity for householders, and industry sector and bill

- amount for non-household customers), with a varied geographic distribution across the Anglian Water region.
- Main Stage Willingness to Pay Study, Anglian Water: Hartlepool Water Summary, v1, ICS Consulting, Eftec, and Facts International, January 2018. This report provides disaggregated results for the Main Stage Willingness to Pay survey for household respondents who are customers of Hartlepool Water. One hundred and fifty respondents took part (the total sample for the whole Anglian Water region was 900). Sample quotas were set based on respondents' gender, age, and socio-economic group. Respondents were interviewed at home, and only saw the water services block of questions from the survey.
- CCWater Research Report, Water Matters 2016/17: Summary of Research Findings for Anglian Water. There are limited details on this research in the summary provided, however it is based on a nationally representative survey of water and sewerage customers commissioned by CCWater. Quotas were set for each company to try to ensure that the number of interviews achieved were within +/-5% of 2011 Census figures for each region. The survey explores customer satisfaction with a number of different aspects of Anglian Water's service. Results for Anglian Water are set against average scores for all water and sewerage companies.
- CCWater Research Report, Water Matters 2017/18: Summary of Research Findings for Anglian Water. This research provided updated figures for 2017/18.
- CCWater Research Report, Water Matters 2016/17: Summary of Research Findings for Hartlepool Water. This report sets out results from the same nationally representative survey for customers in the Hartlepool area. Results for Hartlepool Water customers are set against average scores for all water-only companies.
- CCWater Research Report, Water Matters 2017/18: Summary of Research Findings for Hartlepool Water. This research provided updated figures for 2017/18.
- Acceptability Testing: PCs/ODIs, Final Results, Accent, April 2018. This research explored customer feedback on compulsory and proposed bespoke performance commitments in Anglian Water's draft PR19 business plan, and their views on likely bill changes in relation to these issues. The compulsory performance commitments explored were: water supply interruptions; internal sewer flooding; household customer satisfaction; developer satisfaction; the compliance risk index; drought resilience; rainfall resilience; per capita consumption; reducing leakage; pollution incidence; and asset health relating to mains bursts, unplanned outages, sewer collapses, and treatment works compliance. The bespoke performance commitments explored included: low water pressure; external sewer flooding; retailer satisfaction; vulnerable customer satisfaction; gap sites and voids; customers supplied by a single source; coastal water quality; the abstraction incentive mechanism; natural capital; operational carbon; and embodied carbon. The survey reached 995 household customers (495 by telephone and 500 online, with 945 in the Anglian region and 50 in Hartlepool), and 500 non-household customers. For household customers, quotas were set to ensure the overall dataset was representative of Anglian Water and Hartlepool Water customers by age, socio-economic grade, and gender. Follow-up depth interviews were held with 16 participants (11 household customers and five non-household customers) to explore how descriptions of outcome delivery incentives (ODIs) could be made easier to understand, and whether (and why) customers think they should be based on in-period or end of-period performance.
- Spreadsheet of key customer service and complaints data provided by Anglian Water, May 2018. This spreadsheet features four tabs. The first two tabs feature information compiled by Anglian Water (see below). The final two tabs feature SIM data provided by Ofwat based on

quarterly surveys of customers who have contacted Anglian Water. They show the reason for the customer contacting the company and what customers think Anglian Water could do to improve. Over the year, Ofwat surveys 600 customers. The SIM data reviewed for this report relates to the period 2016-17 Quarter 1 – 2017-18 Quarter 2, and so is based on 900 customers' feedback. (Note, not all data is currently included in the synthesis report, as the author is awaiting clarification on some points).

• Acceptability Testing: Outline Business Plan, Final Quantitative Data, Accent, no date. Phase three of the acceptability testing sought customers' views on the outline business plan, which sets out Anglian Water's plans for the next five years. A survey was administered with 1619 household customers (1002 customers of wate and water servies in the Anglian Water dual supply area, 200 customers of waste services in the Essex and Suffolk Water area, 217 customers of waste services in the Cambridge Water area, and 200 customers of Hartlepool Water). Half the interviews were conducted by telephone and half online via a commercial panel. Quotas were set to ensure the overall dataset was representative of the customer base (by age, gender, and socio-economic grade). Household data were also weighted using the latest Census data. Five hundred telephone interviews were held with non-household customers.

Purposively sampled qualitative research and deliberative engagement

These types of activity allow greater space for participants to shape discussions and share what matters most to them. They can provide useful insight into the reasons for customers' views, experiences or behaviours and the factors that have shaped these. If sampling is robust (reflecting population profiles), findings can provide insight into the range and diversity of views (and other factors) in the population. However, findings cannot be considered to be representative. These sources are coded "2" in the appendix grids.

The new sources of this type that have been reviewed for this report are:

- Customer Behavioural Segmentation: research report, Allto Consulting, 7th April 2017. Follow up, qualitative interviews were held with 24 respondents who took part in the Allto segmentation survey (four in each segment) to explore segment characteristics in more detail.
- Customer World Focus Groups, Given London, 17 January 7th March 2017. The purpose
 of this research was to understand customer worlds from their perspective, in order to inform
 the framing and language used in PR19 and wider engagement activities. The work involved six
 two-hour focus groups targeting a range of domestic customers at different life stages and in
 different situations, including customers in vulnerable situations (45 individuals were involved in
 total). The focus groups were held in a range of locations across the Anglian Water region.
 Members of Anglian Water staff, and representatives from the CEF and from CC Water attended
 or listened in.
- Anglian Water Co-creation output, Given London, May 2017. The purpose of the co-creation events was to engage customers in thinking about the long-term challenges the company faces and identify: the language and topics that should be used to engage people in debates about low likelihood but high impact events; the areas that should be prioritised by the business; and the changes that customers would be prepared to make to help conserve water. Six events were held with domestic customers in locations across the Anglian Water region (reaching over 70 customers). Recruitment was based on the customer behavioural segmentation created in the Allto research. Anglian Water staff attended each workshop, and members of the CEF attended one of the events. One of these workshops was held in Hartlepool (with customers from the "eco-economiser", "protective provincial", and "careful budgeter" segments). An additional

- workshop was held with the Anglian Water steering team and six customers from the different customer segments.
- Review of our crisis management response, separate report on Horncastle co-creation
 event, Given London, date (no date). A separate co-creation event was held with customers
 who had been affected by the recent outage in Louth. This targetted 16 customers, some of
 whom had been severely impacted (48 hours without water), and others who had experienced
 more minor disruption. Anglian Water staff were present for the first and last session.
- Vulnerable Customers: Qualitative Research for Anglian Water, Accent, May 2017. The purpose of this research was to inform the definition of vulnerability and the language used to talk to customers about these issues. The research also sought to explore the different types of vulnerable customers within the Anglian Water customer base, their priorities, and any additional support they might want from the company. The research involved 20 depth interviews with customers in five different locations (four interviews in each, including in Hartlepool). Participants were recruited to reflect the existing definition of vulnerability in the Water Industry Act and covered customers: with literacy/language difficulties; with medical issues/high water needs; with physical disabilities; on low incomes; who are digitally disengaged; and those from older age groups. The interviews with customers in Hartlepool focused on customers who were digitally disengaged, on low incomes, of older age, and with physical disabilities.
- Anglian Water: Customers in Vulnerable Circumstances, Research Report, Community Research, May 2017 (first draft). This second study on vulnerability aimed to inform a definition of vulnerability that could underpin Anglian Water's services and communication with customers, and explore these customers' expectations and the barriers they experience in accessing services and support. It involved 20 depth interviews with customers experiencing a range of vulnerabilities that were judged to be temporary, sporadic and more permanent, including: low income/unemployment; mental and physical health problems; critical lifestage challenges/changes to family form; and literacy/language-related difficulties.
- Love Every Drop Online Community trial, incling, 26th June 2017. This was an eight-week trial (w/c 3rd April- w/c 22nd May 2017) of an online community involving 300 customers reflecting each of the six Anglian Water customer segments. The trial involved a mix of: open discussions; concept evaluations (testing language and content); polls; and screen cast activities (capturing participants' screens and voices as they navigated through and reacted to materials). Participants also started their own conversations with each other. Activities explored: the big, long-term challenges facing customers, the world and the company; ambitions for the future and reactions to Anglian Water's priorities; the ten outcomes; and final reflections on priorities, what Anglian Water should be focusing on, and what customers are prepared to do to help. A separate document with customer quotes on a wide range of topics considered by the online community was also reviewed for this report.
- Drought Resilience: Exploring customer acceptance and buy-in, incling, August 2017.
 This research involved a group of seventy customers taking part in four additional activities on the Love Every Drop online community specifically focused on drought resilience. Activities explored: perceptions of drought risk in the region; reactions to extreme drought measures; buy-in to further investment; and views about metering and leakage. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Customer Feedback on Sewerage Rehabilitation: Qual insight from the Love Every Drop customer community, incling, June 2017. This research involved a group of twenty Anglian Water customers taking part in two specific activities focused on sewerage rehabilitation, over the course of a week. Activities explored: customer experiences of pipe-work disruptions;

- reactions to Anglian Water's rehabilitation programme; and the elements of the strategy that had the biggest impact on customer perceptions. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Low pressure customer engagement: Qual insight from the Love Every Drop customer community, incling, September 2017: This research involved a group of up to 80 Anglian Water customers taking part in a dedicated discussion on low pressure, over the course of one week. The discussion explored: experiences and views of low pressure; reactions to Anglian Water's investment plans; and customers' willingness to pay to support improvement in this area. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Flooding customer engagement: Qual insight from the Love Every Drop customer community, incling, October 2017. This research involved a group of Anglian Water customers taking part in a dedicated discussion on flooding on the online community, over the course of three weeks. Up to 80 participants took part in each of the three conversations. These explored: customer understanding, perceptions, feelings and first-hand experiences of flooding; reactions to Anglian Water's flooding plans; and reactions and buy-in to SuDs (Sustainable Urban Drainage Systems). A mix of participants from across the East of England, different age groups, and customer segments took part.
- Alternative water customer engagement: Qual insight from the Love Every Drop customer community, incling, November 2017. This research involved a group of Anglian Water customers taking part in a dedicated discussion on "green water" on the online community, over the course of two weeks. Up to 80 participants took part in each of the discussions. These explored: reactions and buy-in to the idea of "green water" supplied separately to standard water; issues about the practical use of this water in the home; reactions to Anglian Water's partnership with developers; and customer motivations and the need for incentives. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Water Resources Focus Groups: Reviewing the Survey Findings and Reliability, ICS Consulting Ltd and Economics for the Environment Consultancy Ltd (eftec), date unclear. The purpose of these focus groups was to validate some of the key findings from the water resources research, in particular those relating to water restrictions. (Other validation groups were run on water resource options, which were written up as part of the main report, cited above). The groups explored: what customers understood about the different types of restrictions and how these might impact them; what they thought about current levels of service for each of the restrictions; whether customer views concurred with findings from the survey; and how customers felt about paying £2 more to bring Anglian Water into line with the rest of the industry on levels of service for standpipes. Two groups were held in Lincoln, each with eight customers, of a mix of genders and ages, and from a range of socio-economic groups.
- Vulnerability: Qual insight from the Love Every Drop customer community, incling,
 December 2017. This research involved a group of Anglian Water customers taking part in a
 dedicated discussion about vulnerability on the online community, over the course of one week.
 Up to 50 participants took part in each of the discussions. These explored: customer perceptions
 of "vulnerability" and who can be affected; the types of support customers spontaneously identify
 as important (and how this fits with expectations of the role of the water company and of
 Government); and feedback on some of Anglian Water's initiatives and plans in this area. A mix
 of participants from across the East of England, different age groups, and customer segments
 took part.

- Catchment Management: Qual insight from the Love Every Drop customer community, incling, December 2017. This research involved a group of Anglian Water customers taking part in a dedicated discussion about catchment management on the online community, over the course of two weeks. Up to 90 participants took part in each of the discussions. These explored: customer awareness of and knowledge about water treatment and whether farmers and farming spontaneously come up in conversations about quality; the trade-offs that Anglian Water faces between further treatment versus protecting water at source; and views about incentivising farmers. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Hardness: Qual insight from the Love Every Drop customer community, incling, December 2017. This research involved a group of Anglian Water customers taking part in a dedicated discussion about water hardness on the online community, over the course of one week. Up to 35 participants took part in each of the discussions. These explored: customer experiences of living with hard water; customer behaviours in response to hard water; customer perceptions of the seriousness of hard water and tolerance for it; and expectations of what Anglian Water could or should do about this issue. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Anglian Water Customer Conversation: Biosolids, Given London, December 6th 2017.
 This research was a focus group discussion with six customers in Sleaford to discuss their perspectives on Anglian Water and on biosolids. Discussions explored: experiences of and perspectives on Anglian Water; views on personal and commercial responsibilities for the environment; awareness and perceptions of biosolids; and investment priorities in relation to biosolids for PR19.
- Cyber security: Qual insight from the Love Every Drop customer community, incling, January 2018: This research involved a group of Anglian Water customers taking part in a dedicated discussion on cyber security on the online community, over the course of one week. Up to eighty responses were gathered for each activity. The discussion explored: customers' understanding of the risks in relation to cyber security, the need to comply with evolving legislation, and the need for investment; prioritisation of cyber security in relation to assets; and whether planned investment levels feel appropriate. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Financial Fairness: Qual insight from the Love Every Drop customer community, incling, 2nd February 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about financial fairness on the online community, over the course of one week. Up to 80 participants took part in the discussions. These explored: customer reactions to learning about the actions taken by Anglian Water in the past to keep bills low; customer understanding of the need to shift the balance of responsibility for paying for investment between current and future customers (as new technology means the average lifespan of the asset base is getting shorter); and buy-in to the notion of restoring the balance so that current customers pay their fair share of bills and costs are not unfairly placed on future generations. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Smart water meters: Qual insight from the Love Every Drop customer community, incling,
 December 2018. This research involved a group of Anglian Water customers taking part in a
 dedicated discussion about smart water meters on the online community, over the course of
 three weeks. Up to 10 participants took part in the discussions. These explored: customer
 perceptions and expectations of, and needs in relation to, smart meters; the benefits and

- challenges of having a smart meter; the data and messaging channels that impact on perceptions of smart meters; and feedback on the My Use portal in the context of encouraging behaviour change. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Pollution definition customer engagement: Insight from the Love Every Drop customer community, incling, March 2018. This research involved a group of Anglian Water customers taking part in a poll and discussions about pollution on the online community, over the course of three days. One hundred and twenty seven participants took part. The research explored the language used to describe pollution and how this fits with customer understanding and expectations. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Electric Fleet: Qual insight from the Love Every Drop customer community, incling, February 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about Anglian Water's vehicle fleet on the online community, over the course of one week. Up to 80 participants took part in the discussions. These explored: how much of a priority a "greener" fleet is for customers; customer understanding of hybrid and electric vehicles; customer views on Anglian Water making a switch to a greener fleet; and customer expectations about how much difference this is likely to make in practice. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Biosolids: Qual insight from the Love Every Drop customer community, incling, February 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about biosolids on the online community, over the course of one week. Up to 80 participants took part in the discussions. These explored: current levels of customer awareness and concern about plastic and microplastics in biosolids; what new information alters perceptions of these issues; what customers expect from Anglian Water; what more customers would like to know about the company's approach; and how customers might be able to help. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Long-duration interruption: Qual insight from the Love Every Drop customer community, incling, December 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about long-duration interruptions on the online community, over the course of two weeks. Up to 35 participants took part in the discussions. These explored: what is acceptable to customers in terms of the length of time to be without water (and the impact of time of day and type of support offered); customers' willingness to pay to prevent unplanned interruptions; and the trade-offs customers are prepared to make between immediate and longer-term solutions to the problem of long-duration interruptions. A mix of participants from across the East of England, different age groups, and customer segments took part.
- River quality: Qual insight from the Love Every Drop customer community, incling, December 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about river quality on the online community, over the course of one week. Up to 35 participants took part in the discussions. These explored customer attitudes to: Anglian Water complying with regulations without considering the full impact of their work on regional ecology; Anglian Water investing in restoring river habitat and ecology that will naturally facilitate good quality rivers; and the company investing in measures that will also improve recreational quality. A mix of participants from across the East of England, different age groups, and customer segments took part.

- Anglian Water brand routes: Qual insight from the Love Every Drop customer community, incling, April 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about Anglian Water's brand on the online community, over the course of two weeks. Up to 80 participants took part in the discussions. These explored: customer feedback on two alternative brand strategy routes that have been identified through research as possible ways in which Anglian Water can engage more closely with their customers; alignment between the two routes and customers' expectations of Anglian Water; customer specific expectations in relation to each route; and customers' ideas about gaps and any other suggestions on brand they may have. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Q-Analysis: Qual insight from the Love Every Drop customer community, incling,
 November 2018. This research involved a group of Anglian Water customers taking part in a
 dedicated discussion about Anglian Water's Q-Analysis research on the online community, over
 the course of one week. Up to 41 participants took part in the discussions. These explored which
 customer segments, age categories, and genders associated most strongly with the five
 viewpoints that were identified through the University of East Anglia's Q-Analysis research study
 (outlined above). A mix of participants from across the East of England, different age groups,
 and customer segments took part.
- Water resource management: Qual insight from the Love Every Drop customer community, incling, March 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion about Anglian Water's Water Resource Management Plan on the online community, over the course of three weeks. Eighty-plus participants took part in the discussions. These explored: whether customers think that reducing demand is a priority; the extent to which customers are willing to change their behaviour to help with this; how customers feel about compulsory metering as part of the solution; and the extent to which they feel that climate change should be a consideration in investment (and which investment options they support). A mix of participants from across the East of England, different age groups, and customer segments took part.
- Anglian Water: PR19 Draft Business Plan Research with Customers in Vulnerable Circumstances, Community Research, v2, May 2018. The objectives of this research were to understand attitudes to the following issues among customers in vulnerable circumstances: their current bill (and awareness of and views about what it actually pays for); three options for investment over 2020-25 and associated bill profiles; the outcome delivery incentive (ODI) for leakage (specifically whether Anglian Water should strive to retain its leading position even if this adds to bill costs); Anglian Water's vulnerability strategy (including awareness of current services and responses to proposed services); and feedback on proposed ways of measuring success in reaching and supporting customers in vulnerable circumstances. The research involved seven focus groups with different customer groups: older people (in Skegness); younger women (in Ipswich): low income families (in Corby): Deaf people (in Northampton); people with English as a second language (in Boston); visually impaired people (in Grantham); and low-income families (in Hartlepool). In total, 53 customers took part in the research. The fieldwork took place in early April 2018. A range of approaches were used to ensure all customers could fully participate in discussions, including use of British Sign Language (BSL) interpreters, and high contrast print, and EasyRead materials.
- PR19 Consultation Feedback (from the online community), incling, 21st May 2018. The purpose of this research was to gather feedback on Anglian Water's draft PR19 plan from the 500 customers who took part in the online community. Insight was gathered through a six-week programme of activities based around the key consultation questions. Participants interacted

through a series of discussions, polls and videos. The research explored customer responses to the proposed: level of investment; performance commitments; and billing scenarios (including views on deferring costs and an enhanced leakage reward). The report sets out the remaining questions that participants had after reading the plan.

- WINEP (Water Industry National Environmental Programme)/Natural Capital: Feedback from the Love Every Drop online community, incling, June 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion on WINEP/natural capital on the online community, over the course of one week. Up to 80 participants took part in the discussions. As a follow up to the consultation process, participants were presented with a natural capital case study, and asked a range of questions in order to: capture their responses to the move to natural capital solutions; assess their buy-in to natural capital investments as opposed to "hard engineering" solutions; and identify any questions or barriers they might raise. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Water Quality & Social Capital: Feedback from the Love Every Drop online community, incling, June 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion on water quality contacts and on social capital on the online community, over the course of one week. Up to 80 participants took part in discussions on each topic. As a follow up to the consultation process, the activities explored: customers' views about Anglian Water's proposed direction of travel in both these areas; their reactions to specific targets in the outline business plan; and any elements of the targets they disagreed with or challenged. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Exploring Affordability and vulnerability support increase: Feedback from the Love Every Drop online community, incling, July 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion on affordability and vulnerability support, over the course of two weeks. Up to 80 participants took part in discussions on each topic. The discussions explored: the drivers of affordability, the prioritisation of water in decisions about spend, and perceived impacts of non-payment; and buy-in to current vulnerability initiatives and investment. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Exploring Sludge Transport: Feedback from the Love Every Drop online community, incling, July 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion on sludge transport, over the course of one week. Up to 80 participants took part in the discussions. The discussions explored: customers' spontaneous reactions to learning more about Anglian Water's approach to treating and transporting sludge; specific areas that resonated positively with customers; and any questions or concerns customers had about Anglian Water's approach. A mix of participants from across the East of England, different age groups, and customer segments took part.
- Corporate Governance: Feedback from the Love Every Drop online community, incling, August 2018. This research involved a group of Anglian Water customers taking part in a dedicated discussion on corporate governance, over the course of one week. Up to 80 participants took part in the discussions. The discussions explored: customer reactions to a recent press release relating to business structure and corporate governance, with a specific focus on transparency. Discussions explored: spontaneous reactions to the press release; whether customers feel Anglian Water is going about improving transparency in the most appropriate way; and the impact of the press release on perceptions of the company. A mix of

participants from across the East of England, different age groups, and customer segments took part.

Self-selecting research and engagement activities

The main purpose of this type of activity is to establish a dialogue with customers and encourage anyone who is interested in taking part to share their views. These activities provide insight into the types of issues that attract the most attention from customers, and can provide a useful sense of some of the main issues and debates that come up. However, views cannot be considered representative, or even indicative of the range and diversity of views in the population, as key population segments may be missing. These sources are coded "3" in the appendix grids.

The new sources of this type that have been reviewed for this report are:

- Customer Engagement Strategy: Board Debrief, Anglian Water, 5th December 2016, (based on work carried out by Given London). The purpose of the strategy development process was to explore with customers and staff how best to engage customers in on-going research and engagement activities and the language, topics and activities that would resonate with different groups of people. The process involved: interviews and workshops with Anglian Water staff; discussions with the CEF; expert interviews; best practice and parallel worlds research; interviews with vulnerable customers and big business representatives; a workshop for small business leaders; and co-creation events for household customers. (The board debrief document was reviewed for insights on self-selecting activities that have not been written up separately e.g. staff workshops).
- Engagement Strategy Update, Anglian Water, 31st July 2017 (for information on Anglian Water's "bus", or mobile exhibition and engagement space). The Anglian Water bus visited 18 locations across the region between April and June 2017. In total, 5121 customers engaged with activities on the bus in some way. Activities included: four voting stations situated around the bus (which asked for customers' views on company priorities and gained insight into their behaviours); a final voting station on exit (which asked about change in attitudes and likely behaviours after visiting the bus); and a quiz that helped customers to understand their own water use. (The engagement strategy document was reviewed for this report, as engagement on the bus was not written up separately.)
- H2OMG: A report on our first water festival, part of our PR19 customer engagement strategy, Anglian Water (no date). This week long water festival, which took place in The Forum in Norwich, was designed to grab attention and engage a large number of customers in debates about water suppy resilience. The design concept for the event was a funfair, and engagement centred around four themed stalls: a "wheel of fortune" (which introduced customers to the 10 outcomes and explored their response to drought risk); a "magnet maze" (which explored views on options for deficit reduction); "beat the bog" (which introduced customers to key facts about what gets flushed down the toilet and its implications for the sewerage system); and a "testing the water" stall (which focused on future service levels and attitudes to restrictions). A separate information desk included a voting station exploring customer views on smart metering. Footfall at the event was 33,000, with 20,825 separate interactions with customers recorded. In addition, 346,599 customers were reached through social media (with 24,206 actively engaged), and 3,286,622 were reached through print media, radio and TV. Social media activity included five Twitter polls exploring customer views on key topics. Forty three volunteers from across Anglian Water were trained and supported the H2OMG festival.

- Future Customer Workshop: Greater Peterborough University Technical College, Anglian Water, 16th October 2017. This was an hour-long focus group discussion with eight year 12 students at the Technical College (a member of staff also attended). The discussion introduced participants to the big challenges facing Anglian Water and to the 10 outcomes, explored the company's plans, and identified what else participants felt the company should be doing to meet their challenges and goals. This group was run and written up by Anglian Water's education team. It was part of the company's regular, on-going work in schools, rather an activity specifically commissioned for PR19.
- Future Customer Workshop: Thomas Clarkson Academy, Wisbech, Anglian Water, 5th September 2017. This was an hour-long focus group discussion with eight year 12 and 13 students at the Academy (a member of staff also attended). The discussion introduced participants to the big challenges facing Anglian Water and to the 10 outcomes, explored the company's plans, and identified what else participants felt the company should be doing to meet their challenges and goals. This group was run and written up by Anglian Water's education team. It was part of the company's regular, on-going work in schools, rather an activity specifically commissioned for PR19.
- Future Customer Workshop: Peele Academy, Long Sutton, Anglian Water, 11th October 2017. This was an hour-long focus group discussion with nine year 10 students at the Academy (a member of staff also attended). The discussion introduced participants to the big challenges facing Anglian Water and to the 10 outcomes, explored the company's plans, and identified what else participants felt the company should be doing to meet their challenges and goals. This group was run and written up by Anglian Water's education team. It was part of the company's regular, on-going work in schools, rather an activity specifically commissioned for PR19.
- Future Customer Workshop: Northampton High School for Girls, Anglian Water, 1st February 2018. This workshop comprised three 25-minute sessions with (in total) 56 year 11 students. The discussion introduced participants to the big challenges facing Anglian Water, and then posed three questions. What would you do to ensure long-term water sustainability? What impact will population growth have on long-term water supply, and what should Anglian Water do about this? And what will be the impact of climate change on the region, and what should Anglian Water do about this? This group was run and written up by Anglian Water's education team. It was part of the company's regular, on-going work in schools, rather an activity specifically commissioned for PR19.
- "100 homeworks": feedback from children and parents on the Strategic Direction Statement, Anglian Water ("raw" data, no date). Anglian Water's Community Education team gave out 1500 questionnaires to schools they visited or who visited the education centres in Chelmsford and Leighton Buzzard. Pupils were asked to complete the questionnaires with their parents/carers as part of their homework, after receiving sessions delivered by Anglian Water on water efficiency and Keep It Clear messaging (for primary school pupils), or curriculum lessons on catchment management (for secondary school pupils). The questionnaires provided some information about Anglian Water's Strategic Direction Statement and posed two questions: "are we focusing on the right long-term challenges?"; and "do you agree with the long-term ambitions?" Fifty three completed questionnaires were returned. In some cases responses were provided by children, in others by parents, and in most cases by both parties. This activity has not been written up formally; a spreadsheet of responses and participant comments compiled by Anglian Water was reviewed for this report.
- Results from Facebook and Twitter poll on "green water", Anglian Water, November 2017.
 On Facebook, customers were asked for their views about whether it would be a good idea if all

new homes in the future (2050) had two supplies of water, one for drinking and washing and the other, green water, for flushing the toilet and watering the garden. A similar (but not identical) question was posed on Twitter. A total of 777 votes were cast on Facebook and 139 on Twitter. This activity has not been written up formally; "raw" data provided by Anglian Water was reviewed for this report.

- Hard Water Customer Focus Group: exploring attitudes and behaviours towards hard water in Colchester, Given London, no date. This research was based on an informal, 60 minute, focus group with eight Anglian Water customers. The discussion covered: customers' lives and priorities; water hardness and whether this matters to customers; and what customers would like Anglian Water to do about water hardness in future. Although not specifically recruited against the company's segmentation, a mix of customers took part. Participants were neither "fans" nor "detractors" of the brand.
- Anglian Water Customer Conversation: Water outage in Daventry, focus group, Given London, 17th January 2018. This was a focus group with seven customers in Daventry, to discuss the water outage on 23rd-24th December 2017 (which affected 1400 customers for 48 hours). Discussions explored: perspectives on Anglian Water; the impact of the incident on customers; reflections on Anglian Water's response to the event; and customer views on different ways of responding in future. Participants included men and women of a variety of ages (from 41-75), and from a range of different occupational groups.
- Anglian Water Customer Conversation: Hartlepool Water, Given London, December 12th 2017. This was an informal, 2.5 hour, focus group with ten Hartlepool Water customers. The discussion explored: customers' lives and personal priorities; perspectives on Anglian Water; and what customers would like to see more of from Hartlepool Water in future. Although not specifically recruited against the company's segmentation, a mix of customers took part. Participants were neither "fans" nor "detractors" of the brand.
- Anglian Water Consumer Engagement Topic Analysis: linkfluence, March 2018. The
 purpose of this research was to better understand the voice of the consumer through an analysis
 of social and digital media content. The research analysed key messages about Anglian Water
 from blogs, websites, media and social media, for the period from 1st February 2017 31st
 January 2018. The focus was on English language and UK content. The research sought to
 uncover consumers' key topics of interest, examine their experience with water services, and
 their engagement with Anglian Water itself.
- Feedback from water retailers: notes from meetings between Anglian Water and retail customers, Anglian Water, April/May 2018. During April and May, a series of meetings were held with five of Anglian Water's retail customers: Waterscan; Wave; Business Stream; Castle Water; and The Water Retail Company. Retail customers were provided with an overview of Anglian Water's draft PR19 plans and Water Resources Management Plan. They were then asked for their views about: Anglian Water's four long-term ambitions; the aspects of the service that they feel are most important; water efficiency and what would help promote this further; wholesale tariffs; alternative sources of water; and the possibility of having an outcome delivery incentive (ODI) on retailer satisfaction.
- Spreadsheet of responses to polls carried out by Anglian Water Community Ambassadors, Anglian Water, May 2018. This spreadsheet captures responses from polls held during a series of community meetings hosted by Anglian Water's community Ambassadors. Events were held in 23 locations across the Anglian Water region, between September 2017 and May 2018. In total, 404 people attended these events. (A further seven events were planned in other locations at the time of writing this report.) Polls explored a range

of issues including: how much water customers think they use every day; customer reactions to different strategies for replacing private lead pipes; feedback on various strategies to encourage reduced consumption, including compulsory metering; customer attitudes to Anglian Water working in partnership with various stakeholder groups; views on what the company's on-going approach to climate change should be; and views on whether the company should go beyond the legal minimum in providing services. (Note, this data is not yet included in this synthesis, as the author is awaiting clarification on some points).

• Vulnerability Poll, Anglian Water, December 2017. This was a poll posted on both Twitter and Facebook, asking customers if they would be willing to pay £2 extra on their water bill to fund more specialist services for customers in vulnerable circumstances, including those with health conditions, the elderly, and people with disabilities. In total, the 344 people completed the poll (105 on Twitter and 239 on Facebook). The message from Anglian Water that featured the poll, and included information about the company's approach to vulnerability, reached 5923 people.

Organisational performance data and service feedback.

This data can provide useful insight into the company's interactions with customers and customers' experience. Data may relate to small numbers of customers who have contacted the company for particular reasons (e.g. to complain about a specific service experience). While findings provide important insight into such experiences, they cannot be considered representative of the whole population base. These sources are coded "4" in the appendix grids.

- Note from Anglian Water staff lead on lead replacement programme, September 2017. Anglian Water have been trialling an incentivisation scheme for customers to replace lead pipes surrounding their properties. The scheme focused on three areas in Norwich (of varying levels of affluence), as five of the public water supply zones in the area feature in the top 10 of 164 zones in Anglian Water's risk assessment, and customers there have been active in engaging on this issue in the past. The note summarises the steps that were taken to encourage take up of the incentivisation scheme and actual take up rates. (Note, this is not a full research report).
- Spreadsheet of key customer service and complaints data provided by Anglian Water, May 2018. This spreadsheet features four tabs. The first two tabs feature information compiled by Anglian Water. The first provides data on customer communication with the company using six key channels and the reason for the contact. The second tab sets out the categorisation of "watermelon", a combination of Anglian Water's own internal SIM tracker and responses to a survey that customers are asked to complete at the end of a call to the company. The final two tabs feature SIM data provided by Ofwat (see above). (Note, not all data is currently included in the synthesis report, as the author is awaiting clarification on some points).

Changes to this version of the report

As highlighted above, this report has been updated and amended on a rolling basis, as new sources of evidence have become available, and colleagues at Anglian Water and on the CEF have provided feedback on the format and presentation that they find most useful. The key changes that were made for each previous iteration of the report are as follows:

• v1 – 30th June 2017. This first version included findings from: the customer behavioural segmentation survey report and qualitative interviews; the customer world focus groups; the cocreation events; the two qualitative studies on vulnerable customers; and the debrief for Anglian Water's Board on the customer engagement strategy. This version of the report had three levels of detail: a short overview; a mid level summary; and a more detailed summary.

- v2 7th July 2017. This version added findings from: the main online community trial.
- v3 31st July 2017. This version added findings from: the acceptability testing on the Strategic
 Direction Statement. The report was also reformatted at this stage, with a summary table of
 headline messages included in place of the original top level summary.
- v4 29th August 2017. This version added findings from the online community activities focused on drought resilience.
- v5 9th October 2017. This version added findings from: the online community activities focused on sewerage rehabilitation; the online community activities focused on low pressure; and a note from Anglian Water on their lead replacement programme. In this version, the section on resilience was also restructured, to distinguish more clearly between findings relating to short-term interruptions and to longer-term drought restrictions.
- v6 6th November 2017. This version added findings from: the Community Perception Survey; the engagement strategy update (for information on Anglian Water's "bus"); and the H2OMG event. Findings from an additional document with detailed customer comments from the online community was also included. The mid level summary was removed at this stage. In addition, some further detail on the approach taken to this synthesis was included in the introduction.
- v7 7th December 2017. This version added findings from: the three future customer workshops; the online community activities focused on flooding; the online community activities focused on alternative sources of water; findings from the "100 homeworks" exercise; the results of the Facebook and Twitter polls on "green water"; the Water Resources Second Stage survey; the Water Resources research validation focus groups; and the valuation research on flooding and roadworks.
- v8 22nd December 2017. This version added findings from: the online community activities focused on vulnerability; the online community activities focused on catchment management; and the online community activities focused on water hardness.
- v9 23rd February 2018. This version added findings from: waves two and three of research for the latest Community Perception Survey (from October and December 2017); the focus group on biosolids; the online community activities focused on cyber security; the online community activities focused on financial fairness; the focus group on hard water; the focus group with customers of Hartlepool Water; and a fourth workshop with future customers. In this version of the report, icons representing Hartlepool Water and Anglian Water's business customers were also added to make it easier for the reader to find messages that relate to these types of customers.
- v10 26th March 2018. This version added findings from: the online community activities focused on smart water meters; the study combining customers' subjective preferences with their willingness to pay for river water quality improvements; and disaggregated results from the Main Stage Willingness to Pay survey for Hartlepool Water customers. In this version of the report, some additional detail relating to Hartlepool Water customers was also added from reports already included in the synthesis, including the co-creation workshops and the segmentation research. This was done to ensure the maximum possible insight about Hartlepool Water customers was included in the synthesis report, and so that this information could then be drawn together into a stand-alone summary relating to these customers.
- v11 9th May 2018. This version added findings from: the Main Stage Willingness to Pay study (final report for all customer groups).

- v12 4th June 2018. This version added findings from: the Community Perception Study (full results for the year 2017/18); online community activities focused on pollution definition; CCWater Water Matters research results for Anglian Water and Hartlepool Water from 2016/17; social and digital media analysis; online community activities on Anglian Water's vehicle fleet; online community activities on biosolids; online community activities on long-duration interruptions; online community activities on river quality; online community activities on Anglian Water's brand; online community activities on the Q-Analysis research (discussed above); feedback from water retailers; online activities on water resource management; acceptability testing on performance commitments and outcome delivery incentives; PR19 draft business plan research with customers in vulnerable circumstances; aggregate results from the customer segmentation research; analysis of Anglian Water's customer service and complaints data (partial data); and PR19 consultation feedback from customers who took part in the online community.
- v13 9th July 2018. This version added updated figures for the CCWater Water Matters research for 2017/18 for both Anglian Water and Hartlepool Water.

The following changes have been made to this current version of the report:

v14 – 14th August 2018. This version added findings from: the acceptability testing of the outline business plan; the vulnerability poll held on Twitter and Facebook; the online community activities on WINEP/natural capital; the online community activities on water quality and social capital; the online community activities on affordability and vulnerability support; the online community activities on sludge transport; and the online activities on corporarate governance.

2. Key Customer Engagement Messages

	Key Messages			Ар	plies	To F	ortfo	olio		
	Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services
Customer Worlds	Life feels busy and tough for many customers. Many are very concerned about their household finances. This makes it hard to think about the future and wider social and environmental issues. Communities feel more divided. For some, but not all customers, a sense of community is now more closely associated with their online life/communities of interest than their local area. There is growing mistrust of news and information. Many customers feel their voices have not been heard. There is a desire for greater leadership and reassurance from government and powerful organisations. Despite some common themes, however, research suggests there are a number of different segments within the Anglian Water customer base, and these segments differ in their attitudes, behaviours, characteristics, and experience of life. These groups are unevenly distributed across the area that Anglian Water serves.									
	Most customers don't think about their water supply very much. Some customers are surprised and shocked to learn that water is not an infinite resource. Most customers agree that water is a precious resource and say they make every effort to save it in their household. However, views about this appear to vary across the customer base. When introduced to the major challenges affecting the planet, most customers feel water conservation will become much more important in future.									
Messages That Span The Outcomes	There is limited understanding of Anglian Water's roles and responsibilities, but evidence suggests the company's reputation is generally positive, and trust in it has been increasing over the past seven years. Awareness of Anglian Water's activities in the community and the environment is low; boosting this enhances perceptions of the company. Evidence suggests Hartlepool Water is a particularly well-liked and trusted local organisation. Customers in some segments are typically more positive about Anglian Water than others. Evidence suggests that no single, consistent perception of Anglian Water's brand cuts through. Customers in different segments appear to favour different future "brand routes" for the company.									
Message	Cybersecurity is a real concern for customers. However, in general, the water industry is not regarded as high-risk, compared to other sectors such as banking or government. Customers' concerns about data security centre on personal safety (e.g. identity theft). Attacks on the IT systems of Anglian Water assets are less front of mind. Customers expect Anglian Water to have a high level of cybersecurity in place that goes beyond the minimum. They also expect the company to keep anti-virus software and firewalls up to date, ensure customer data is protected through use of encryption/passwords, implement strict data protection policies and protocols for employees, and continually stress test their systems. The new Network and Information Systems (NIS) Directive is regarded positively by most customers. The £33m Anglian Water estimate it will cost to respond to the NIS is generally seen as a sound investment. However customers want to be reassured that this represents the evolution of past initiatives, rather than a measure to deal with under-investment or insufficient planning in the past.									

	Key Messages		Abblies Lo Bourge Collection Water Treatment Water Distribution Water Distribution Sewerage Collection Water Recycling Bio-Resources Developer-Led Growth									
	Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services		
Messages That Span The Outcomes Cont	Overall acceptability of the Strategic Direction Statement is high, although views vary by customer segment. Customers generally feel the company has identified the right long-term challenges and goals. They also view all the outcomes as important. Overall customers seem to prioritise: affordability and customer expectations (of the six major challenges); safe clean water, supply meets demand, fair charges and satisfied customers (of the ten outcomes); achieving 100% chemical-free drinking water, zero pollutions and flooding and zero leaks and bursts (of the seven water quality and customer satisfaction goals); and resilience (of the four stretching long-term goals). All major attributes (relating to water, sewerage and wider services) are considered important. For many of these, customers are keen to maintain rather than improve performance (as satisfaction is generally high already). However, customers are willing to pay for improvements if they are judged to be pertinent and value for money. Customers generally prioritise improvements that have a wider impact across the region (e.g. leakage, river water quality and pollution), and they have a strong preference for avoiding deterioration in service levels, especially in relation to environmental outcomes (e.g. bathing water quality, river water quality and pollution incidents) and aspects of the service that have a high and direct impact on customers (e.g. internal sewer flooding, and severe water restrictions). For household customers, willingness to pay for improvements varies by income/socio-economic grade. Improvements in water services appear to be more important in customers' decisions to support a package of service changes than improvements to the waste service. Hartlepool Water customers' priorities are generally aligned to those of customers from the wider Anglian Water region. Most customers who have been consulted supported the plan, felt reassured that the company was addressing the right issues, and felt that proposed bill increases were ju											
	A range of channels and approaches are needed to engage customers. Engagement needs to feel relevant, be easy for customers, and be tailored to the interests and concerns of different customer segments. Some customers feel Anglian Water's outcomes and goals are vaguely worded and aspirational, and want more detail on specific plans, targets and milestones. However, feedback suggests customers have enjoyed taking part in research and engagement activities and have found them interesting and informative. There is evidence that these activities have raised the profile and reputation of the company, and have also changed customer attitudes on the substantive issues. Customers are keen to know what difference their feedback has already had and will have on company's plans.											

	Key Messages			Ар	plies	То Г	Portfo	olio		
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ners	Overall satisfaction with the service is high. Satisfaction appears to be driven by perceptions of: a high quality, reliable service; the company's understanding approach to billing; and, generally, timely provision of information. For Hartlepool Water, it also seems to be linked to having a local presence and a perception that the company supports the local community. For Anglian Water, satisfaction with the water service appears to be slightly higher than for the sewerage service, however satisfaction with sewerage services has been increasing over the past seven years. Satisfaction also appears to be higher among household than business customers. Service problems are infrequent. Of those customers that have experienced problems with the water service the most common issues relate to the aesthetic quality of water, hardness (for households), occasional low pressure and (for households unexpected and non-household customers planned) interruptions to supply. For the sewerage service, the most frequent problems relate to blocked drains, sewage flooding (inside for households and in public places for non-household customers), odour from treatment plants (for households) and flushing of toilets (for non-household customers). Affordability and Customer Expectations is viewed as the most important of Anglian Water's six major challenges, and is particularly important to some customer segments. There is support for the company's goal to achieve 100% customer satisfaction. Of the retail measures in the outline business plan, greatest importance is attached to those relating to customers in vulnerable circumstances and the customer measure of experience. Less importance is attached to measures on retailer and developer satisfaction. Most customers think the customer service targets are sufficiently stretching, although household customers are less sure. Non-household customers are more likely to think certain targets are stretching.									
Satisfied Customers	Customer service is considered a very important service attribute. Most customers are satisfied with the customer service they receive, however satisfaction is lower for nonhousehold customers. Hartlepool Water customers seem to be particularly satisfied with customer service. Most customers who contact the company are satisfied with the handling of their query. However while satisfaction with this aspect of the service seems to have been increasing over the past seven years among Anglian Water customers, some evidence suggests it has been declining among Hartlepool Water customers. Most customers feel their company cares about the customers it serves; the percentage of Anglian Water customers who think this has been increasing over recent years. However, evidence suggests there has been a decline in the perception that "Anglian Water treats its customers as individuals". In general, customer service does not seem to be a key priority for further investment, however this is more important to business than household customers. Customers support digital transformation, but this is seen as the least important of Anglian Water's long-term goals and something the company should be doing anyway. For enquiries to the company, especially if they are urgent, the preferred route remains the phone. However, some customers are particularly keen on communicating with the company through digital channels. Recent engagement suggests that disruption is where the company becomes a "hero or a villain", depending on how incidents are dealt with. Engagement with customers who have experienced a recent outage revealed that most were not unduly inconvenienced and were generally satisfied with the company's response. However there is room to improve communication with customers in the event of an incident. Road closures and traffic disruption are regarded as the worst side-effects of work taking place. It is frustrating to customers if closures go on for weeks, without a clear end-date, and with little visibility of work actuall									

	Key Messages			Ар	plies	То Г	Portfo	olio		
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Satisfied Customers Cont/	 Research suggests a need to "reframe" vulnerability and focus instead on <u>customers in vulnerable situations</u>. The severity of the challenges customers face, the nature of their support networks, their financial literacy and confidence, and their emotional responses all shape experiences of vulnerability. Fear or actual experience of being patronised or stigmatised is a key barrier to seeking help. However, most customers in these situations report positive experiences of dealing with the company. Awareness of additional services and support is still fairly limited, but has been increasing among customers of both Anglian Water and Hartlepool Water in recent years. Increasing awareness still further is regarded as the most important thing the company can do to improve the situation for these customers, however the channels for doing this will require careful thought to ensure they are genuinely accessible. There is strong support for Anglian Water working in partnership with other agencies to identify customers with additional needs and provide support to them, however there are some concerns about datasharing. Some recent research suggests (muted) support for the idea of an independent board to champion the needs and interests of "vulnerable" customers, however customers want reassurance that panel members will be independent and this will not be a "tick-box" exercise. There is support for Anglian Water's PR19 plans and proposed bespoke performance commitment on vulnerable customers. However support for a measure based on the number of people on the priority register is more mixed (some customers feel that any number would be arbitrary). Some customers feel the company should not be incentivised for providing the kind of service to vulnerable customers they should be providing anyway. Most customers feel the company's targets in this area are sufficiently stretching, although household customers are less sure. The majority of customers seem to be willing to pay a little more to support vulnerable c									
eS	Sewer flooding is seen as a particularly serious (but rare) service failure. Sewer flooding in the home is viewed as most serious by both household and business customers. However, some recent research suggests that, per incident, internal sewer flooding has less of an impact on customer wellbeing than external sewer flooding, as it affects fewer households. There is generally high satisfaction with current service levels, however satisfaction appears to be lower for non-household customers, and in relation to external sewer flooding. Customers are willing to pay for improvements; they are also especially keen to avoid deterioration in this area. There is some evidence that willingness to pay more to support the few customers affected by sewer flooding varies by segment. Although concerned about this issue, customers don't want to be "fear-mongered" about it. While it remains common practice for the public to use sewers to dispose of inappropriate items of household waste, the vast majority of customers say it is important to reduce blockages. However there are differences in opinion about this issue across customer segments. Alongside a deteriorating network, customers identify other people's behaviour as partly responsible for blockages (in particular the flushing of baby wipes, cooking grease/fat and sanitary products). Available evidence suggests there is support for the company's PR19 plans in relation to internal and external sewer flooding and risk of sewer flooding in a storm. However, compared to other recycling measures, fewer customers think targets in these areas are sufficiently stretching.									

	Key Messages			Ар	plies	То Р	ortfo	olio		
I.	Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services
	Although some customers are very focused on budgeting and saving, most feel their water bills are value for money, affordable and fair. Hartlepool Water customers are particularly satisfied with value for money. Among Anglian Water customers, satisfaction with value for money of both water and sewerage services has been increasing over the past few years, and in recent data the company also performs strongly on affordability and fairness of charges, compared to other combined companies. Although most customers say they rarely or never experience difficulty in paying their water bill, this varies by customer segment. Unreliable income, unexpectedly high bills, and deficits that accrue on accounts when direct debits are not updated create difficulties for customers, especially those in vulnerable situations. However even customers in vulnerable situations are generally more focused on other utility bills. Most customers of Anglian Water and Hartlepool Water say they would contact their company if they were worried about being able to pay their bill, however the proportion saying this has declined for both companies over the past few years. Water is regarded as a fairly low risk area in terms of the consequences of non-payment. There is a perception that Anglian Water would be lenient with customers who can't pay and work with them to find an appropriate solution. Customer Expectations and Affordability was judged to be the most important of Anglian Water's six major challenges. Fair Charges was also ranked highly of the 10 outcomes.									
Fair Charges	On average, research suggests householders are willing to pay an additional £19-£27 and businesses 8%-9% a year for a defined set of improvements (or £29-£35 and 11%-13% excluding zero protest votes). The key reasons customers give for supporting a set of service improvements is that they offer value for money and focus on the most pertinent issues. Improvements in water services appear to be more important than improvements to the waste service in shaping customer support for a package of improvements. Those customers who support status quo options are largely motivated by satisfaction with current service levels or concerns about affordability. Household customers' willingness to pay for a package of improvements appears to vary by income/socio-economic grade. Willingness to pay among Hartlepool Water customers is largely consistent with overall results. Customers generally support going beyond minimum levels of investment to protect water supplies for the future. They also generally support investing in and paying for improvements earlier rather than later. However, some customers are reluctant to pay more themselves to protect future customers; there is evidence of differences in opinion across customer groups and segments in this regard. Customers generally prefer bills to change steadily, and to avoid sudden increases. Most customers support in-period rather than end-of period bill changes, until they find out about how performance is measured and reported, when they tend to change their minds. Most evidence suggests customers understand that Anglian Water's performance can be affected by factors outside of its control and there is some evidence that they support buffer zones and caps on penalties and rewards for performance. There is support for the additional leakage charge for enhanced performance, so long as it remains at the £4 mark. Overall, Anglian Water's draft PR19 plan is regarded as affordable, and ratings of affordability increase when customers are better informed.									
	There is mixed evidence on whether customers find their bills/basis for charging clear or not. Some evidence suggests a degree of confusion about bills and how bill amounts are calculated. However, robust quantitative evidence suggests most customers find their bills relatively easy to understand. Customers want more tailored advice on the best deal for their household. Some retail customers do not feel that the company's wholesale tariffs currently promote water saving. There is interest in how the company spends the payments it receives from customers.									

	Key Messages			Ар	plies	То Р	Portfo	olio		
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	• There is very limited awareness of <u>additional (financial)</u> support for those who struggle to pay, however awareness of the WaterSure tariff has been increasing among customers of both companies over the past few years. Available_evidence suggests most customers feel that Anglian Water did a good job of understanding their circumstances and needs when they applied for additional support. While there is strong support for Anglian Water's initiatives in relation to vulnerability, customers draw the line at providing financial support to others that has a large impact on their own bill. There are differences between customer segments in willingness to pay more to subsidise others. It is important to customers for Anglian Water to be able to distinguish between those customers that "can't pay" and those that "won't pay". Some customers feel strongly that billing support is a responsibility of Government rather than water companies. Some feel that support should come from Anglian Water's profits, not customer bills. As highlighted above, most customers of Anglian Water and Hartlepool Water say they would contact their company if they were worried about being able to pay their bill. However, the proportion saying this has declined for both companies over the past few years.									
Fair Charges Cont/	There are high rates of metering for both household and business customers in the Anglian area. Rates are much lower for Hartlepool Water, however some (limited) recent research suggests customers in Hartlepool are interested in the potential of meters to help save money. Awareness of the free water meter scheme has been increasing among both Anglian Water and Hartlepool Water customers over the past few years; awareness of the 24-month trial has also been increasing among Hartlepool Water customers. Evidence suggests most customers are supportive of meters, which are generally seen as the fairest way to pay. Customers also feel meters focus their minds on saving. Compulsory metering divides opinion. However, recent research suggests that on average household customers support this over encouraging optional metering. There is support for Anglian Water's strategy to achieve 95% coverage of meters by 2035. There is a great deal of interest in smart meters; these were one of the most popular ideas that customers came up with for encouraging behaviour change. Some recent evidence suggests most customers are now happy to have a smart meter. However, support for this, and interest in controlling water use remotely, varies by customer segment. Customers highlight financial savings, the opportunity to make informed choices, early detection of leaks, and the chance to educate children about the cost of water used in common household activities as motivations for installing a smart meter. However, they want more information about who is eligible, the installation process, and the consultation about tho is eligible, the installation process, and the consultation about who is eligible, the installation process, and the consultation about who is eligible, the installation process, and the consultation and My Use Portal was generally positive. Plans for advanced metering were one of the areas that stood out as particularly interesting to participants who took part in the consultation on the draft PR19 plan.									
Safe Clean Water	Safe, clean water is a <u>fundamental customer expectation</u> . It is seen as the most important of Anglian Water's ten outcomes. All attributes are regarded as important, especially aesthetics (taste, odour and discolouration) and a plentiful supply with no interruptions. Improvements in water services appear to be more important in customers' decisions to support a package of service changes than improvements to the waste service.									

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	Customers are aware that water quality can be affected by many factors, including nature, household activities, and industry and farming. Water quality is generally regarded as good. The vast majority of customers of both Anglian Water and Hartlepool Water are satisfied with the safety of their water. Some customers are concerned, though, about the mass consumption of plastic and some want common issues with water quality to be addressed so use of bottled water declines. Achieving 100% compliant and chemical-free drinking water is seen as the most important of the company's seven water quality and customer satisfaction goals. There is support for Anglian Water's PR19 plans to achieve zero compliance failures, including by working with stakeholders, businesses and farmers.									
Safe Clean Water Cont/	• The most frequent problems with the water service relate to aesthetic quality, hardness (for households), low pressure, and (for households unplanned and business customers planned) supply interruptions. While problems with aesthetics and water pressure are fairly common, the vast majority of customers are satisfied with these aspects of their water service. Among Anglian Water customers, satisfaction with the taste and smell of water and water pressure has been rising over the past few years. Evidence suggests customers support the company's plans in relation to improvements to discolouration. Some research suggests that while low pressure is a common issue, customers do not find it unduly distressing in the short-term, and do not immediately buy-into Anglian Water's investment plans in this area. However, there is support for the company's PR19 plans on this topic. There is some concern about lead in pipes. However, take up of Anglian Water's incentivisation scheme for customers to replace lead pipes surrounding their properties has been very low. Available information suggests this may be because customers feel the work is too expensive and will cause too much disruption. Satisfaction with the hardness of water is markedly lower than satisfaction with other aspects of the service; Anglian Water scores poorly on this dimension in relation to other companies. Recent research suggests customers generally prefer soft to hard water as it involves less time and expense in removing limescale, requires less detergent, means household appliances last longer, and (for many people) tastes better. However, most customers accept hard water is a feature of the local water environment and learn to live with it. Some research suggests customers generally feel it is the responsibility of homeowners to tackle hard water, while other research suggests customers may be willing to pay more for the water company to take action.									
	Some customers find the <u>catchment management</u> approach hard to understand. Recent research confirms there is concern about the impact of pollution on human health and the ecosystem. Most research suggests customers are supportive of attempts to protect water quality at source, and think major polluters should do more to reduce pollution. While some research suggests customers spontaneously tend to focus on treatment rather than prevention, hearing about the costs of treatment, and programmes that have been successful in changing polluters' behaviour, helps to convince those who are initially more sceptical. Views about polluters and how best to tackle pollution vary. For example, some customers favour incentivising farmers and other polluters to reduce pollution, while others are strongly against this. Some customers favour increased legislative controls, while others reject this. Recent research suggests there may be systematic differences between groups of customers in their viewpoints on the topic of river water quality.									
Resilient Services	 Although it is initially difficult to engage customers on the topic of resilience, this seems to be viewed as the most important of Anglian Water's four long-term strategic ambitions. However, the term does not resonate with customers. Many customers are sceptical about climate change, or do not see this as a pressing issue, although future customers seem more focused on it, and there is widespread concern about some of the implications of climate change, such as flooding. Some customers want to know more about what the company is doing to boost resilience; others want it to "just get on with it" (as the experts). Knowing that Anglian Water plans 25 years ahead boosts perceptions of it as a proactive and forward-thinking company. 									

	Key Messages		Nater Distribution Water Distribution Water Distribution Water Distribution Sewerage Collection Water Recycling Bio-Resources Developer-Led Growth							
	Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services
	 Interruptions to supply are among the more commonly experienced problems with the water supply for both types of customer (especially unplanned interruptions). However, household satisfaction with performance on unplanned interruptions is relatively high, and most of these customers support maintaining rather than improving current service levels. Satisfaction is lower for non-household customers, and improvement is more important to them. However, research suggests both types of customers are willing to pay to improve current service levels. Recent engagement suggests that disruption is where the company becomes a "hero or a villain", depending on how incidents are dealt with. Engagement with customers who have experienced a recent outage revealed most were not unduly inconvenienced. Satisfaction with the company's response was mixed. There is room to improve communication with customers in the event of an incident. It is especially important to customers to know how long an interruption is likely to last, so they can plan around this. (Limited) research suggests that interruptions lasting up to 12 or even 24 hours are generally manageable, although this depends on the time/day of the week, and customers are concerned about the impact on those with young children, with disabilities, the elderly, and local businesses. For interruptions lasting more than 12-24 hours, there is some support for using tankers to supply water, but there are also concerns about the impact on traffic flow and noise. Generally customers do not support bill increases to fund this solution. There is strong support for Anglian Water's draft PR19 proposals on interruptions, and support for its plans to reduce the number of properties on a single supply (although this is less of a customer priority). 									
Resilient Services Cont/	Severe water restrictions are one of the most unwanted service failures and customers are willing to pay to prevent these. Awareness is lower for severe restrictions, particularly among household customers; some are shocked that having no tap water is even a possibility in a country with so much rainfall. While some customers support a reduction in service levels, in general both household and non-household customers support maintenance of current service levels for hosepipe and non-essential use bans. Both household and non-household customers have strong preferences for avoiding deterioration and for improvements to levels of service for no tap water. Non-household customers also have strong preferences for avoiding deterioration and for improvements to levels of service for rota cuts. Customers think that more severe restrictions should be imposed for the minimum length of time possible. Discussion of serious water restrictions leads customers to question whether Anglian Water is doing everything it can to save water and manage the infrastructure effectively. Although, overall, Hartlepool Water customers' priorities are aligned to those for the wider Anglian Water region, severe water restrictions have a noticeably reduced level of importance for these customers. The company's draft PR19 goals to reduce severe restrictions to zero by 2025 are well received, and targets in the plan are regarded as sufficiently stretching.									
	Evidence suggests customers are concerned about <u>flooding</u> . Some customers are confused about how scarcity can co-exist with flooding. Customers are critical of house-building in areas susceptible to flooding. They are also less sympathetic to those who experience flooding after buying a property in a known flood risk area. PR14 stated preference research suggested internal flooding is viewed as worse than external flooding, and sewer flooding worse than water flooding. However some recent research suggests water flooding has a higher per incident impact on customer wellbeing than sewer flooding, and external sewer flooding a higher per incident impact than internal sewer flooding, as these incidents tend to affect more people. The impact of flooding on customer wellbeing is also higher in urban areas, as more people are affected. Of Anglian Water's seven water quality and customer satisfaction goals, "zero pollutions and flooding" is rated as one of customers' top priorities. Customers are generally supportive of a progressive surface water management strategy, and Anglian Water's goal to reduce unwanted water flow by 100%. However, some feel this is pushing more responsibilities on to customers to pay for improvements, the benefits may not be seen in their lifetimes, and more obvious solutions (such as clearing drains) should be tried first. Customers are supportive of Sustainable Urban Drainage Systems (SuDs), though they feel use of the acronym can be confusing. Some SuDs are seen as more practical for customers to install than others.									

	Key Messages		Raw Water Resources Raw Water Distribution Water Treatment Water Distribution Sewerage Collection Water Recycling Bio-Resources Developer-Led Growth									
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Resilient Services Cont/	Most customers support further <u>investment in resilience</u> to ensure there is spare capacity in the system to deal with problems like extreme floods, power outages, and long periods of drought. Customers generally support going beyond minimum levels of investment to protect water supplies for the future. They also generally support investing in and paying for improvements sooner rather than later. However, some customers are reluctant to pay more themselves to protect future customers; there is evidence of differences in opinion across customer groups and segments in this regard. Accepting a price rise is often dependent on Anglian Water helping customers to save water, doing everything it can to reduce its own use, and investing in the water supply. Customers generally trust Anglian Water to choose the most cost-effective mix of solutions. However, evidence suggests customers prefer options that avoid perceived waste (leakage reduction, recycling/reusing treated waste water) and promote efficiency (water saving devices), as well as a couple of new water resource options (storing water underground and extending existing reservoirs). Customers also prefer options that are more reliable.											
pu	Customers acknowledge that the combination of <u>increasing demand and decreasing supply creates challenges</u> for Anglian Water. Supply Meets Demand is regarded as one of the most important of the company's ten outcomes. Customers are very concerned about population growth and new development; enabling sustainable growth is generally seen as the second most important of the company's four long-term goals, after resilience (although customers link the two issues). Customers want the company to plan ahead, influence the planning system, and work in partnership with landlords and developers to "design-in" water efficiency. Some customers want to know more about what the company is doing in this area; others want it to "just get on with it" (as the experts). However, knowing that Anglian Water plans 25 years ahead boosts perceptions of it as a proactive and forward-thinking company.											
Supply Meets Demand	Helping customers to reduce their own water use is seen as an important way of tackling pressures on the water system. Most customers recognise they have a responsibility to change their behaviour, however some are sceptical about the difference their own actions will make, without other customers also doing the same. For customers to feel motivated, they need to know what actions will have the greatest impact; they also want to know that Anglian Water is "doing its bit" too. Most customers feel Anglian Water is promoting water efficiency, but awareness of the company's activities in this area is low. Financial incentives are a key motivator for reducing consumption, but evidence suggests campaigns will need to appeal to a range of motivations that may differ by customer group. There is room to increase awareness of behaviour change campaigns. Evidence suggests future campaigns are more likely to capture customers' attention if they: bring the issues to life for people; build in an element of competition; harness the power of collective and local efforts; and are centred around children and young people. Evidence suggests most customers support the 80 litres per person per day goal, however of the company's seven water quality and customer satisfaction goals, there is least support for this one. Some customers view it as "unfair rationing". There is support for the company's PR19 plans to help customers reduce their use.											

Key Messages			Sewerage Collection Water Treatment Water Distribution Water Distribution Water Distribution Water Distribution Water Distribution Water Recycling Bito-Resources Developer-Led Growth Information Services I								
Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services		
• It is very important to customers that Anglian Water "does its bit" to conserve water. Customers are particularly concerned about leaks, which are seen as an "emblematic issue". Although some research suggests most customers are broadly satisfied with Anglian Water's current (industry-leading) performance on leaks, this is still regarded at the worst aspect of the water service and a very clear priority for future improvement at investment. Leaks are seen as an unnocecessary waste of a precious natural resource. They are also seen as one reason why restrictions are sometimes necessary, and tackling them is a customer priority for dealing with the deficit. Slow restoration times for leaks feeds negative sentiment about the company. There is some (limited) evidence to customers in Hartlepool are more satisfied with the company's response to leaks, however this is still a priority for improvement. Customers support the zero leakage and bursts target, but want to know more about how it will be achieved in practice. Anglian Water's PR19 plans on leakage are very well received. There is support for the addition leakage charge for enhanced performance, so long as it remains at the £4 mark. Most customers feel the targets in the business plan for leaks and reactive and mains bursts are sufficiently stretching, although agreement is lower for the bursts targets than for other water measures in the plan.	nd or hat d										
• With a few exceptions, customers generally prioritise demand over supply-side water resource options. They prefer options that avoid perceived waste (leakage reduction, recycling/re-using treated waste water) and promote efficiency (water-saving devices), well as a couple of new water resource options (storing water underground and extend existing reservoirs). Customers also prefer options that are more reliable. Although sor research suggests a degree of support for transferring water and desalination, the mos robust research suggests these are the least popular options. Some customers are concerned about the use of drinking-grade water for activities where this is not required (e.g. flushing the toilet, watering the garden, washing the car). There is support for the concept of "green water", however customers are concerned about the cost and disruption involved in installation. A focus on new builds is seen as a logical place to begin in installing green water. Customers are supportive of Anglian Water working in partnership with developers to do this. Customers feel that incentives will be needed to encourage installation in existing properties. They also feel that "green water" needs a name change and careful branding to build customer support.	ing me it										
Research suggests that problems with the <u>sewerage service</u> are also infrequent, in particular for household customers. Satisfaction with the sewerage service appears to slightly lower than for the water service, and lower among non-household than househ customers. However, it is still high, and data suggests it has been increasing over the past few years. Sewer flooding (inside properties for households and in public places for non-household customers), blocked drains, odour (for households) and inability to flust toilets (for non-household customers) are among the most common problems. Improvements to sewer flooding inside homes and bathing water quality at beaches are priorities for both household and non-household customers. Overall, improvements in waste services appear to be less important in customers' decisions to support a package of service changes than improvements to the water service. The majority of customers agree it is unacceptable to flush household/food waste down the toilet, although there a differences by customer segment. Reactions to the sewerage rehabilitation strategy and positive; sharing the strategy helps customers understand the scale of the challenge at creates an impression of Anglian Water as a proactive company that is thinking ahead and trying to minimise disruption on customers' lives. In consultations on the draft PR1 plan, sewer collapses emerge as a priority issue.	or or e e ge are e										

	Key Messages			Ар	plies	То Р	ortfo	olio		
	Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services
	Environmental protection is considered an important aspect of Anglian Water's work. Evidence suggests interest in, and concern about, the environment is growing. However, it remains important to show customers how environmental issues may affect their own lives, and give them confidence that individual efforts to protect the environment can make a difference. Willingness to Pay evidence suggests customers prioritise improvements that have a wider impact across the region (including river water quality and pollution, as well as leaks), and that they have strong preferences for avoiding deterioration in service levels, especially in relation to environmental outcomes (as well as aspects of the service that have a high and direct impact on customers, e.g. internal sewer flooding). Evidence suggests most customers think Anglian Water cares about the environment, but awareness of the company's environmental and community activities is low. Raising awareness of these activities boosts positive perceptions of the company. There is support for the company's plans to reduce the negative impact of its operations on the environment and to work with others to achieve wider change. Draft PR19 plans to develop a "balance sheet" to measure company impact on the environment are very well-received. Available evidence suggests customers buy-into natural capital solutions; these are regarded as a positive approach to water treatment and a "win-win" in terms of compliance, cost and environmental protection.									
A Flourishing Environment	Preventing pollution and protecting local water bodies are key customer concerns. Problems are infrequent, and most customers are broadly satisfied with the quality of local rivers and performance on pollution incidents. However, satisfaction is lower than for other attributes, and these areas (along with bathing water quality) are clear customer priorities for improvement. Awareness of Anglian Water's current work in protecting local water bodies is low, but there is some evidence that it is increasing. Zero pollutions and flooding is seen as the second most important of Anglian Water's seven water quality and customer satisfaction goals. Evidence suggests customers view rivers as more than just local water bodies; they are also valued as a place for relaxation and wellbeing. Customers view river management as a shared responsibility between government, the Environment Agency, local businesses (including the water company), local authorities and customers. Some (limited) evidence suggests customers want Anglian Water to go beyond a focus on meeting current chemical standards for river water, to facilitate improvements in aesthetic quality and public use and enjoyment of rivers. However, support for this is not without limits. Although most customers want conservation to be built into decision-making and think that major polluters should do more to reduce pollution, views about how best to tackle pollution appear to vary between customer groups (e.g. on the role of incentives and penalties for polluters, and on government intervention). Customers appear to interpret the same description of a pollution incident in different ways (including drawing different conclusions about its seriousness), possibly reflecting different beliefs and attitudes or prior experience of the issue). Draft PR19 plans to tackle pollution, reduce abstraction from environmentally-sensitive sites and improve bathing water quality are well-received, and targets are regarded as sufficiently stretching.									
	Most customers say they <u>consider the environment</u> in their day-to-day life, and the proportion saying this seems to be increasing. It is important to customers that businesses balance the needs of themselves, their customers, the local community and the environment. After affordability, a desire to protect the environment was one of the key reasons given for supporting a package of service improvements in some recent research. However, there appear to be differences between segments in the extent to which customers say they make environmentally-friendly choices in their everyday lives. There are also differences between segments in views about how finances should be raised to protect the environment. However, overall, slightly more customers think finances should be raised through the water bill than via income tax.									

	Key Messages		Applies To Portfolio								
	Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services	
	Most customers support Anglian Water's efforts to reduce its own carbon footprint. However, A Smaller Footprint is ranked low in order of importance of the 10 outcomes. Energy neutrality is also ranked as less important than many of the other water quality and customer satisfaction goals and long-term ambitions (although it is still considered important). Customers want to see more detail about how carbon neutrality ambitions will be met, including some interim targets and milestones. Anglian Water's commitments to a circular economy are also ranked low of its seven water quality and customer satisfaction goals. Some customers find the terminology confusing. When introduced to the company's plans with respect to water foot-printing, some customers feel strongly that the company should already know how much water it uses. However, the company's draft PR19 plans to reduce carbon emissions from construction projects were well-received, and targets in this area are regarded as sufficiently stretching.										
A Smaller Footprint	Customers are keen for Anglian Water to reduce waste from its processes and switch to more sustainable sources of energy. Evidence suggests there is very limited awareness of biosolids, or the company's role in their production. Support for biosolids seems to be mixed. Some research suggests customers regard production of biosolids as a much more environmentally-friendly option for dealing with waste than incineration, landfill, or dumping at sea, and a more natural way of fertilising land than use of chemical pesticides. Other research suggests customers are concerned about the use of biosolids on land. Confidence in, and acceptance of, biosolids centres on the quality and safety of the product. There are some concerns that the privatisation of the market in biosolids may lead to a decline in quality. Customers are increasingly concerned about plastic waste, and the potential for this to infiltrate the environment and food chain. However, most do not spontaneously make a connection between the processing of waste water and microplastics. Learning more about this increases expectations on Anglian Water to protect the water supply. However, in general, customers regard tackling plastic waste as a shared responsibility between consumers, industry and government. Available evidence suggests most customers accept transportation of sludge as a "necessary evil". While some customers feel strongly that road transportation is not the best option, most customers de eventually agree to this, however they are keen for Anglian Water to continue to explore solutions that achieve the best balance between cost and environmental impact. Customers are supportive of Anglian Water's plans to create a "greener" vehicle fleet. However even the strongest supporters are mindful of the impact on customer bills. As the electric car industry is new, these cars currently have limited range, and there are still few charging points available, some customers advocate trialling new types of vehicles in the first instance, rather than "jumpi										
Caring For Communities	Although Caring for Communities is not ranked very highly in terms of Anglian Water's ten outcomes, it is important to customers that the company cares about the communities it serves. Some evidence suggests this is becoming increasingly important, and is especially critical for customers in Hartlepool. Evidence suggests most customers agree that Anglian Water cares about the communities it serves, although agreement appears to vary by customer group. Awareness of Anglian Water's activities in the environment and community remains low; learning about these boosts positive perceptions of the company. Further communication of the company's activities is regarded as the key to enhancing perceptions still further. Recent research suggests that customer views about whether the company "cares for the environment" and is "socially responsible" are key to overall judgements about whether it cares about the communities it serves. Available evidence suggests that most customers are supportive of Anglian Water's social capital and social impact aim, however the term "social capital" does not resonate. There is most support for initiatives that are local in their focus, and linked to Anglian Water's core purpose. Some customers are much more sceptical about these initiatives; they view them as beyond the water company's remit and as a "charitable donation that customers can't opt out of".										

	Key Messages				Ар	plies	То Р	ortfo	olio		
	Italics = headline messages from evidenc Standard text = messages from pre-June	e gathered post Autumn 2016 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services
	strongly supportive of this activity.	ols programme remains low. However, customers are Customers feel this is important in shaping a o will be more focused on water conservation. There is rogramme in future.									
Caring For Communities Cont/	appears to vary by customer group recreational opportunities at water poor. However, the number of customeremains relatively low. More advert Water can take to address this. Beit transport, is an important theme for customers have higher willingness recreational water quality. However	sure time in the countryside, however enjoyment Customers like the fact that Anglian Water offers barks and nature reserves, whether they use them or mers visiting these facilities on a frequent basis ising and promotion is the key action that Anglian ing able to access the sites, including by public vulnerable customers. Recent research suggests that to pay for improvements to ecological rather than r, being a recreational user of rivers has a positive provements in recreational water quality.									
Caring For	complaints about leaks in public pla works, and road closures and traffic frustrating to customers if road clos with little visibility of work actually to these frustrations. However, some of roadworks on customer wellbein Customers regard the company's roughly positive, contributions it can make. about this aspect of the company's skills, employment, and workplace	any on the community, customers have some aces, incidences of bad smells from sewer treatment of disruption while work takes place. It is especially aures go on for weeks, without a clear end-date, and aking place. Improved communication would ease recent research suggests that the per incident impact go is many times less than that caused by flooding. Only as a local employer as one of the most important, Customers of Hartlepool Water are especially positive activities. There is support for Anglian Water's various wellbeing initiatives. There has been an increase in ink Anglian Water is a company that takes health and									
Investing For Tomorrow	improving infrastructure. Good stew the company. Although Investing for Anglian Water's ten outcomes, plar among the company's six major che about how the company makes investing to "just get on with it" (as the expen minimum levels of investment to presupport investing in and paying for some customers are reluctant to pais evidence of differences in opinior regard. Some people think the chair Water and its shareholders to deal Anglian Water's draft PR19 plan recarefully for the future and has a good customers are particularly pleased these are clear priorities. Most cust	planning ahead, and investing in maintaining and vardship of assets is seen as a core responsibility of our Tomorrow is not ranked particularly highly among aning for the future emerges as a customer priority allenges. Some customers want more information estment decisions; however many want the company its). Customers generally support going beyond otect water supplies for the future. They also generally improvements earlier rather than later. However, my more themselves to protect future customers; there in across customer groups and segments in this inging nature of the asset base is an issue for Anglian with, rather than customers. Overall, reviewing assures customers that the company has planned and strategy in place to improve the infrastructure. It is see a focus on bursts and sewer collapses, as owners think targets in these areas are sufficiently agreeing is less than for other water and recycling									
	However, take up of Anglian Water lead pipes surrounding their proper	ests customers are concerned about <u>lead water pipes.</u> 's incentivisation scheme for customers to replace ties has been very low. Available information suggests If the work is too expensive and will cause too much									

Key Messages			Ар	plies	То Е	Portfo	olio		
Italics = headline messages from evidence gathered post Autumn 2016 Standard text = messages from pre-June 2016 evidence base that may still be relevant	Raw Water Resources	Raw Water Distribution	Water Treatment	Water Distribution	Sewerage Collection	Water Recycling	Bio-Resources	Developer-Led Growth	Information Services
Some customers feel very strongly about private ownership and foreign control of the company, and about monopoly status. However, available evidence suggests that most customers are not very focused on these issues. More customers appear to think companies should be privately run than run by government, however there are some differences of opinion between customer segments. Most customers agree it is important for businesses to balance the needs of themselves, their customers, the local community and the environment, however again views vary by segment. Fair Profits is ranked least important of Anglian Water's ten outcomes (though still important), and markets, structure and financing of the industry as the least important of the company's six major challenges. It seems to have been more difficult to engage customers in meaningful debate on these topics than on others (with the exception of future customers, who appear to have found the issues of interest).									
There is some demand for more transparent information about costs, investment levels, performance and profit. Some customers are particularly concerned about levels of company debt, and about tax avoidance. Among household customers, after concerns about affordability and higher bills, the idea that water companies already make enough profit was the next most popular reason for rejecting a package of service improvements in one piece of recent research. It was the top reason provided by non-household customers who rejected the package. Although the vast majority of customers found the draft PR19 plan acceptable, a perception that Anglian Water should have invested more and taken less as profit in the past, and a concern that future bill increases will support profit not improvement, were key drivers of unacceptability. Customers reacted very positively to a recent press release detailing changes to the company's corporate governance arrangements, including the removal of a Cayman Islands holding company from the corporate structure, reduced levels of dividends and increased shareholder investment in resilience, and plans for more non-executives on the company Board. However, in order to transform perceptions of transparency, customers wanted more information on why the decisions had been taken, and some clear targets in this area.									
(Fairly limited) recent research suggests the Open Water situation is still not well-understood, so the role of water retailers is unclear to many customers. Available evidence suggests most household customers support choice and react positively to Anglian Water's plans to "welcome greater competition" in order to ensure customers receive the best service. However, many customers are not clear how markets in water would work in practice. Evidence suggests household customer views about choice vary by segment.									

3. Detailed findings

This section of the report provides a more detailed write up of the material summarised in the previous section. It clarifies the types of evidence each message has come from, and highlights where messages are supported by multiple sources, and where there is contradictory evidence.

This chapter is intended for Anglian Water staff involved in the technical working groups for each business plan portfolio, and the Customer Engagement Forum, but may also be of wider interest.

Key:

- Green text = messages from the existing evidence base (to June 2016) that have been added
 to the report for completeness and/or to ensure there is a clear link between the different
 levels of reporting
- = messages relating to Anglian Water's business customers (image created by Freepik)
 hartlepool_____
- = messages relating to Hartlepool Water's customers

Relevant To Business Portfolio	Topic Area & Customer Evidence
All	What's On Customers' Minds
	What's emerging (Autumn 2016 onwards)
	Recent engagement activity has put greater emphasis on understanding the world from the customer point of view.
	It's clear from the customer world focus groups and the co-creation events that life feels tough for many customers at the present time. Analysis of social and digital media conversations mentioning Anglian Water (for the period 1 st February 2017-31 st January 2018) showed that money and opportunities to save were key talking points. However, in addition to financial concerns, research suggests that many customers are worried about having to balance numerous competing demands in different areas of life. Most customers feel extremely busy, and for some this "busy-ness" is worn almost "as a badge of honour".
	Recent engagement activity suggests that, partly because of these pressures, many customers find thinking about the future and about wider social and environmental issues very difficult ; most are firmly focused on shorter-term and more personal concerns.
	Engagement activity suggests that for many customers, community is now more strongly associated with their on-line life than connections in their local area. The Brexit referendum and fears about terrorism appear to have contributed to a growing sense of division between people. That said, findings suggest that some customers still have a strong sense of community . For example, the focus group and the co-creation workshop in Hartlepool found that many participants there were actively involved in their local community, were proud of it,

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and felt that many parts of the town remained tight-knit and well-connected. Even in Hartlepool, however, the co-creation workshop found that community spirit was being challenged as the area expanded and changed, and new communities arrived.

There is **growing scepticism about the media** and a loss of faith in the trustworthiness of news and other information, associated with the "post-truth" world. Customers taking part in some of the co-creation workshops felt **overwhelmed with the amount of contradictory information** that gets pushed at them. At the same time, many customers say they are looking for **leadership and reassurance** from powerful organisations and from government. A substantial group of people feel that their voices are currently ignored.

Population growth and change is an issue that many customers are particularly concerned about, both in terms of the impact this has on the appearance and feel of their local area, and in terms of the pressures it puts on local services.

The recent investment in **segmentation research adds nuance to this general picture** and provides deeper insight into the attitudes and behaviours of different groups of customers. The research found, for example, that customers in the "comfortable and caring" segment, (who make up 26% of the customer base and are more likely to be social class AB, aged 55+, and living in a rural area), are feeling more relaxed and financially secure, and remain politically engaged. In contrast, "careful budgeters", (who make up 11% of the customer base and are more likely to be under 35) are strongly focused on managing their own household finances, and are less likely to be active in their community, or have wider interests in politics and the environment. In total, the segmentation research **identified six customer segments**, that differ in their attitudes, behaviours and characteristics.

The segmentation research found that these groups were unevenly distributed across the area that Anglian Water serves. For example, it found that customers in Hartlepool were particularly likely to fall into the "comfortable and caring" group (this made up 31% of the Hartlepool sample), and were more likely to fall into the "careful budgeter" group than customers in the East of the region (15% as opposed to 8%). In addition, the research found that Hartlepool had a significantly higher percentage of "eco-economisers" than the South of the region (18% as opposed to 10%). These customers tend to be older, and strongly focused on both budgeting and making environmentally-friendly choices. It also had a significantly higher percentage of "protective provincials" than the South of the region (12% as opposed to 4%). These customers are more likely to be female, and have a particular interest in immigration issues. All other parts of the region had a significantly higher percentage of "tech savvies" than Hartlepool (39% in the South of the region, for example, compared to just 15% in Hartlepool). This group tend to be younger, male, better off and are less likely to be white British, interested in the environment, or living in a rural area. (The research found that the final group, "family first", was more evenly distributed across the region, making up 12% of the total sample. These customers are more likely to have children under 16 at home and to be from social class C2).

Relevant To Business Portfolio	Topic Area & Customer Evidence
	Despite the challenges of the present, results from the online community trial suggest that many customers have rather hopeful visions of what their lives might look like in 2050 . Customers paint a picture in which the burden of household chores has been lifted through advancements in technology and automation, leaving more time to spend on relationships and healthier lifestyles. Customers anticipate that these changes will also facilitate more remote working, which in turn will reduce people's personal carbon footprint. Customers also foresee an increasing focus on what is "home made" and "authentic" (including more food grown and produced and home). They think social interaction could go one of two ways: either people will be increasingly dependent on social media; or there will be a backlash against this.
All	Messages That Span The Outcomes
	Attitudes to water as a resource
	What we already know (as at June 2016)
	Some household customers involved in qualitative research said that they don't tend to think about water or their water and wastewater services very much . However, when prompted to reflect on this, most customers agreed that water is an essential household resource; some suggested it is more important to them than other utilities.
	What's emerging (Autumn 2016 onwards)
	While water is seen as a vital resource for life, a key theme emerging from the customer world focus groups was that customers had little understanding that their own water supply is under threat . Scarcity was widely seen as an issue that affected other countries, not the UK.
	During discussions at the co-creation events, too, some customers were surprised to find out that water is not an infinite resource . These customers believed that the water cycle means that water cannot run out. The authors of the co-creation report suggest customers found this realisation frightening, though it also helped to make climate change issues more relatable.
	In this year's Community Perception Survey (2017/18), 85% of household customers agreed with the statement "water is precious and I make every effort to save water in my household" (n=1414). Results for this question have been stable since the survey began in 2015.
	These findings appear to be confirmed in the segmentation research, where

These findings appear to be confirmed in the segmentation research, where across the whole customer base that was sampled 61.3% of customers *strongly agreed* with the same statement (answering 9 or 10, where 10 is strongly agree). However, the research revealed some interesting **differences of opinion by customer segment**. For example: only 37.8% of "tech savvies" strongly agreed with the statement (28% of the customer base, who are more likely to be younger, male, with children under 16 at home, and less likely to be white British, have English as a first language and live in a rural area). In contrast, 84.6% of "eco-

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economisers" strongly agreed (14% of the customer base, who are more likely to be over 55, and less likely to have children under 16 living at home).

In the Water Resources Second Stage research, 65% of non-household (business) customers said that water and sewerage services do not receive much management attention in their company (although 41% of respondents said they were keely interested in environmental issues).

After the major challenges facing the planet were outlined to customers in the online community, water became more front of mind. Customers felt that **in the future water conservation will be integral to how we plan and run our homes** and make use of land, and it will have a greater impact on the decisions we make. They felt that water recycling will become the norm, with grey water used for gardens and water butts used to store rain water.

AII

Understanding of and trust in Anglian Water

What we already know (as at June 2016)

Evidence from multiple qualitative research and engagement activities suggests that most customers have **minimal contact** with the company. Evidence suggests patchy and **limited understanding of Anglian Water's different roles** and the scope of the company's activities. Awareness of Anglian Water's activities in the community and in relation to the environment seems particularly limited.

There is some (fairly limited) evidence from qualitative research that business customers and stakeholders are better informed about the company. Among respondents to the Business Customer Satisfaction survey, account managed customers were more aware of certain of Anglian Water's activities than those that were not account managed.

Qualitative research and engagement suggests that many (but not all) customers and stakeholders would **like the company to be doing more to communicate** the full extent of its operations. There seems to be particular interest in receiving more information about: the 'best deal' the company can offer each customer (or customer segment); how customers can save water and therefore reduce their bills; and company performance, profit levels and investment decisions.

In terms of the national picture, the Water Matters survey of household customers in England and Wales run in 2014 found that water and sewerage service providers continue to be seen as more **caring and trustworthy** than energy suppliers. Perceptions of both sectors have improved significantly since 2013, but water companies (75%) are still seen as caring more about the service they provide than energy companies (69%).

In the Weather Sponsorship Brand Tracking survey (2014), 62% of customers said they believed that they can probably or definitely **trust Anglian Water** in the long term, and 60% rate the overall reputation of Anglian water as either good or very good. These scores remained consistent through four waves of research in 2015.

What's emerging (Autumn 2016 onwards)

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Findings from this wave of research appear to confirm that most customers have a fairly **limited understanding** of the full breadth of the company's role and responsibilities. However, recent research and engagement also confirms that Anglian Water is a reasonably well **trusted brand**.

In this year's Community Perception Survey (2017/18), 58% of household customers said they felt Anglian Water was a company they trust (n=1322). Results from year one of the survey (57%, n=1447) and year two (56%, n=1430) were very similar. The latest data from the CCWater Water Matters research (for 2017/18) found an average trust score of 7.93 for Anglian Water (where 10 is trust completely and 1 is do not trust at all, n=395). The range for all water and sewerage companies in this year was 7.17-8.15, and the average was 7.67 (weighted). This represents an **upward seven-year trend** in trust for Anglian Water.

The focus group on biosolids, which included a discussion of general perceptions of Anglian Water, also found that the company was a trusted brand, which was known for being straightforward and honest. **Key drivers of trust** mentioned by (the six) participants in the focus group included: friendly, informed customer service; simple, transparent, interactions with the company around supply and billing; a good value, reliable service; and Anglian Water's activities to protect the environment. Qualitative interviews conducted for the segmentation research found that key drivers of trust include: perceptions of the company's expertise; provision of simple, factual information; industry regulation; the company's need to maintain its reputation; lack of competition (meaning there is no reason for the company to inflate its profile); and personal experience of the service.

Data from the CCWater Water Matters research for Hartlepool Water reveals a trust score of 8.23 for 2017/18 (n=150). The range for all water-only companies was 7.31-8.32 (with a weighted average of 7.69), indicating that **Hartlepool Water is regarded as a particularly trustworthy company**. The focus group with customers of Hartlepool Water confirmed that the company was trusted and well-liked. Being perceived as a **local company that supports local employment** appears to have been important in this. The co-creation workshop held with customers of Hartlepool Water also found that the company was regarded as a good and trusted local business.

Results from the Community Perception Survey suggest that increasing customers' awareness of Anglian Water's involvement in environmental and community activities **boosts positive perceptions of the company**. This year, 67% of household customers said their opinion of Anglian Water had improved after hearing about these aspects of their work, a significant increase over 2015/16 results of 63%. Students who took part in one of the future customer workshops also felt that educating customers about the challenges facing the company, and its successes, might lead them to be **more understanding and satisfied.**

The Community Perception Study for this year (2017/18) also found that 67% of household customers agreed that **Anglian Water is a company that "takes**"

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health and safety seriously" (n=1158). This year's results are a statistically significant increase over 2016/17 results of 63% (results for 2015/16 were 65%).

More broadly, the Community Perception Survey found that customers in the "comfortable and caring" customer segment were typically more positive about Anglian Water on all of the measures explored in the survey. They were also more likely to be aware of Anglian Water's activities in the community and environment. This year, customers of Hartlepool Water were also particularly positive about the company, with significant increases since 2015/16 in the proportion who felt the company was promoting water efficiency, was ethical and fair in doing business and was a major local employer.

Looking across the whole research and engagement programme, participants who took part in the online community also seem to have been, on balance, more positive about Anglian Water and its plans and proposals. This may be because they have engaged with the issues over a longer-period of time and therefore have a better understanding of the challenges and dilemmas the company faces in planning for the future.

Results from the online community trial suggest Anglian Water is seen as a forward-thinking company. Customers praise the company for strong customer service, being proactive in communicating issues with the public, and pioneering public education through its leisure facilities. However, customers didn't feel they knew enough about what the company is doing on energy efficiency, how the company is investing in water conservation, and what customers should do differently to conserve water.

The on-line community trial indicates that customers want Anglian Water to be a leader in conservation and innovation. They are keen to see the company challenging the industry, and collaborating with farmers, other water companies, international stakeholders, and research institutes to make a difference in how people use and re-use water. Students at one of the future customer workshops were also keen to see Anglian Water working in partnership with other water companies in the UK, and stakeholders around the world, to safeguard water for the future.

Quotes from customers who took part in the online community indicate an **interest** in knowing more about Anglian Water's innovation initiatives and the impact they are having. Quotes also suggest that customers support the use of innovation to create efficiencies (and therefore to keep bills affordable). However customers want to know more about how efficiency is defined and measured and how this will be achieved in practice.

While many customers in the online community trial were keen to see that Anglian Water was planning to **engage with policy development**, especially in relation to the environment, not all customers understood the connection between **Brexit and environmental protection**. However, some of the students who took part in one of the future customer workshops expressed concerns about the possible impact of Brexit on the water industry.

Relevant To Business Portfolio	Topic Area & Customer Evidence
	The on-line community trial suggested some differences in opinion about Anglian Water's role among customer segments. For example, "tech savvies" tended to see innovation as a key part of the solution to the longer-term challenges facing the industry and an opportunity for Anglian Water to stand out. They were also more likely to see the company as operating as part of a complex network and emphasised opportunities for Anglian Water to exert a positive influence on others (such as developers). In contrast, "protective provincials" were more likely to emphasise the responsibilties of big corporates to solve problems themselves.
	Perhaps reflecting some of these differences of perspective, the online community activities focused on Anglian Water's "brand routes" found that overall no single , consistent perception of Anglian Water's current brand cut through from conversations with this (now well-informed) group of customers. The company was perceived as friendly, approachable, considered and cautious, caring, and traditional, as well as formal and business-like, ambitious and profit-oriented, reflecting the varied nature of their role and activities.
	The "brand routes" research tested spontaneous associations of Anglian Water with a series of "archetypes". It found that associations were strongest with the figure of the "hero" (seen as protective and resourceful, approachable, empathetic, and cautious yet ambitious). The company was also strongly associated with the figure of the "explorer" (adventurous, focused on pushing boundaries, aware of future challenges and willing to tackle them). The authors concluded that these findings reflect two slightly different sets of customer expectations of Anglian Water.
	The research also tested two possible future "brand routes" with the online community: one in which the company is dedicated to "reducing wastefulness "; and the other in which it is focused on " keeping ahead of a changing world" . Both routes resonated with customers. The first route was found to be more in line with customers' current perceptions of Anglian Water, and was regarded as a realistic, safe and pragmatic response to the pressures in the region. In contrast, the second route felt more modern, bold and proactive. However, it was also perceived to be the tougher of the two options, with fewer predictable and tangible measures attached to it.
	Seemingly confirming results from the online community trial (cited above), the "brand routes" research found some differences in support for these possible future routes among customer segments. Customers from the "comfortable and caring", "family first", and "careful budgeters" groups strongly preferred the route focused on reducing wastefulness. "Tech savvies" and younger people were more receptive to the second route, focused on keeping ahead in a changing world.
All	Cybersecurity
	What's emerging (Autumn 2016 onwards)

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The topic of cybersecurity has been explored for the first time in a series of discussions on the online community. This found that cybersecurity is a real **concern for customers**, linked to personal experience and to media discourse on the topic. However, in general, the water industry was not regarded as high-risk, compared to other sectors such as banking and Government.

The research found that **customers' concerns about data security** are centred around personal safety. Data breaches due to employee negligence or error (resulting in customer data being made public or passed to third parties) are regarded as more likely but less severe in their impact than breaches resulting from external attacks that are intended to cause harm (e.g. identity theft). In either scenario, customers want to be reassured that their personal data will not be compromised.

The research found that attacks on the IT systems of Anglian Water assets are less front of mind. Customers view virus/malware or hacking attacks resulting in temporary disruption to the water supply and treatment processes as being more likely but less severe in their impact than acts of terrorism that affect the water system. Hostile control of water gates to flood areas, tampering with the chemical content of water, and potential poisoning of water treatment facilities are regarded as worst-case scenario events.

The online activities found that **customers expect Anglian Water to have a high level of cybersecurity in place** that goes beyond the minimum. They also expect the company to keep anti-virus software and firewalls up to date, ensure customer data is protected through use of encryption/passwords, implement strict data protection policies and protocols for employees (e.g. covering use of USB sticks, remote working etc), and to continually stress test their systems (e.g. by deploying internal "hackers" or ex-hackers). In a poll conducted as part of the online discussions, most customers (53%) felt that Anglian Water should go above and beyond minimum security standards, even if this involved additional cost. A smaller percentage (44%) felt that the company should ensure all aspects of the company were safe, but at a "reasonable" cost. Just 3% felt that Anglian Water should be foused on meeting the minimum standards required to comply with the law (Note, this was not robust quantitative research).

From May 2018, Anglian Water has had to comply with the **Network and Information Systems Directive**, the first piece of EU-wide legislation on cybersecurity. This requires Operators of Essential Services (including water suppliers) to take appropriate and proportionate measures to manage the risks posed to their network and information systems, and to prevent and minimise the impact of any incidents that take place. Failure to comply with the minimum standards set out in the NIS will result in penalties. The UK government's intention is that this legislation will continue to apply post Brexit, with Defra proposed as the competent authority.

The online activities focused on cybersecurity found that the **NIS Directive was** viewed as a step in the right direction. The Directive aligned with customer views about water being a precious resource that needs to be safeguarded. It was seen as reassuring and helpful in driving up standards and creating a more level

Relevant To **Topic Area & Customer Evidence Business Portfolio** playing field across different industries. It also felt safe but also reasonable, with its emphasis on "appropriate but proportionate" action. For most customers, carrying over the Directive into UK legislation post Brexit also felt sensible. However, customers also had some concerns about the Directive, including that: costs may be passed on to customers in the event of standards not being met and fines being imposed; companies may be unfairly penalised for non-compliance due to attacks beyond their control; and that imposition of minimum standards may expose organisations to similar weaknesses that haven't been identified by the Directive. Some customers also felt that DEFRA was not a credible organisation to be the "the competent" authority in this area, and others (who backed Brexit) disliked the fact that the Directive came from the EU. Overall, the research found that the £33m Anglian Water has estimated that it will cost to respond to the NIS (£30m to improve IT systems at physical infrastructure assets and £3m to improve data protection) felt like a sound investment to most customers. However, some were not convinced by, or didn't understand, the severity of the risks associated with physical assets, and others questioned whether such a big sum was required now because of a lack of forward-planning and investment in the past. In relation to Anglian Water's data protection investment plan, there was buy-in to the idea of initiatives designed to protect personal data falling into the wrong hands. However, some customers questioned why the additional £3m was needed, as they expected regular investment to be part of on-going IT systems security and improvement. Customers also wanted to know what specifically is likely to change in relation to current procedures to tackle data leaks and hacks (as these are long-standing threats), and how long upgrades will be effective for. In relation to Anglian Water's asset protection plan, there was particular buy-in to the notion of protecting against external attacks on water assets. However, some customers expected anti-virus measures to be part of the existing system, and others reacted against having to spend more to protect against carelessness by third parties (feeling this should be resolved by those responsible and covered by their insurance). Customers also had some questions, including: whether remote access creates greater risks for hacking and contamination; whether the current telemetry system can, or should already be able to, deploy patches and updates remotely; and the possible impact of human error on the system in the worst-case scenario. Overall, the research found that customers agree investment is a necessity in order to comply with the new Directive, but they want to be reassured that this represents an evolution of previous initiatives. They also want more contextual information on past initiatives, and current risks, so they can make better judgements about the value for money of any new investments.

All

Prioritisation across the outcomes/overall acceptability of plans

What we already know (as at June 2016)

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Many evidence streams did not ask participants explicitly to prioritise across different outcomes. However, evidence from customer events and qualitative research suggests household customers think all outcomes are important, but tend to prioritise delivery of what they perceive to be the 'core' service to a good standard (providing clean water and safely taking away the wastewater, maintaining and investing in infrastructure and tackling leaks) while keeping bills affordable.

Findings from the events suggest **people's priorities may change on receiving more information**. For example, water quality was re-prioritised above affordable bills when customers were made aware of the extent of lead piping in the system and the need to replace this.

The Acceptability research appears to confirm these findings. The provision of safe, clean water, fair charges and ensuring supply meets demand were the outcomes most likely to be rated 'very' or 'quite' important (on a five point scale). These outcomes were closely followed by satisfied customers and resilience. Other aspects, such as the reduction of carbon emissions and work with the community, were seen to be less important.

As part of the Domestic Customer Survey, respondents were asked to complete the investment simulator to decide on the levels of investment they would like to see in the 11 different areas listed. **Fixing leaks was the top priority for additional investment**. Sixty three percent of respondents chose to increase spend in this area from the pre-set level. Current and future maintenance appeared next in the list of priorities, with 56% of customers indicating that they would support an increase in investment in maintenance from the pre-set level. Another area which appeared to be a high priority for customers was household water efficiency with 61% of respondents choosing to increase spend in this area from the pre-set level.

The PR14 Willingness to Pay Survey consistently identified positive and statistically significant willingness to pay for improved levels of service. The interpretation is that customers were prepared to select improved service levels if they were judged to offer 'value for money'. For water services, both household and non-household customers assigned the highest value to reducing service failures related to persistent low pressure; they attached more value to addressing issues related to the taste and odour of tap water and 'boil water' notices than to unexpected interruptions to supply. With respect to wastewater services, the highest value was assigned to reducing sewer flooding inside properties. There was also significant willingness to pay for both types of customer for improving environmental performance across the Anglian Water region.

In the acceptability research, **initial acceptability of the company's proposed plan was extremely high** at over 90% of each customer group. Even amongst vulnerable customers the figure was 93%. Anglian Water's proposals under each specific element of the plan were also extremely well received – between 91% (the figure recorded for Anglian's proposals in relation to Leaks) and 99% (the figure

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for Delivering a High Quality Core Service) of respondents considered the company's plans to be acceptable. The plan was **also highly likely to be found to be acceptable on consideration**, with acceptance levels for all groups falling only marginally from the initial acceptability level (with the exception of vulnerable customers where the figure dropped from 93% to a still high 73%). Among those people who found the plans unacceptable on reflection, cost was the reason most often cited. Leaks were also frequently mentioned.

In the acceptability research, a majority of water and wastewater respondents (68%) said they felt the **forecast bill level was 'about right'**. Among the 602 customers who felt the proposed bill level was too high, a clear majority (63%) said they would not accept any reduction in the quality of drinking water, and half (48%) were unwilling to see a reduction of service levels in relation to supply and demand (with a further 23% willing to accept only a slight reduction). Customers were most willing to accept significant reductions in service levels in outcome areas relating to a smaller footprint (14%) and care for communities (11%).

What's emerging (Autumn 2016 onwards)

Acceptability research revealed that **overall acceptability of the Strategic Direction Statement is high** among all customer groups (household customers in all segments and non-household customers). The "family first", "ecoeconomiser" and "comfortable and caring" customer segments typically rated acceptability and fit with their own views higher than the average customer, while "tech savvies", "protective provincials" and "careful budgeters" typically rated them lower. Non-household customers rated both acceptability and fit higher than the average household customer. There was a consistent theme in terms of the elements customers would like to see more strongly emphasised: customer education; technology/smart metering; flooding; the environment and pollution and affordability.

In the acceptability research, customers were introduced to **Anglian Water's six major challenges** (climate change, population and economic growth, environmental protection, affordability and customer expectations, planning for the future, and markets, structure and financing of the industry). Customers found the key challenges acceptable (overall 87% said they were acceptable/very acceptable). Customers also felt they matched their own views (overall 79% said they closely/somewhat closely match their views). Of the six challenges, customers felt the **most important ones were affordability and customer expectations, and planning for the future** (89% and 86% of customers felt these were important). The least important was markets, structure and financing of the industry (52%).

Students in the four future customer workshops who were introduced to the **company's major challenges** felt these were easily understandable, made sense, and covered the important points. While markets, structure and financing of the industry was given a low priority in the Acceptability research, participants in the three future customer workshops where all six challenges were outlined seem to have been guite interested in this topic, which generated lots of questions.

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Parents and school children who gave their feedback on elements of the Strategic Direction Statement as part of the "100 homeworks" initiative also reacted positively to the long-term challenges identified by Anglian Water. Of the parents and children who provided their views, 74% (34 parents and 34 children) agreed these were the right issues to focus on. (However, note this was not robust quantitative research). The comments provided also suggest parents and children want the company to focus on maintaining the existing infrastructure, ensuring water is affordable, educating the next generation, and helping households save water.

When asked to prioritise between just three of the six challenges (climate change, population and economic growth, and environmental protection), customers who took part in the online community trial and who visited the Anglian Water bus chose environmental protection as their top priority. Customers taking part in the online trial said this was the challenge that felt most relevant to them on a personal level and which they felt they could influence.

In the acceptability research, customers were introduced to **Anglian Water's 10 outcomes**. Overall, customers found the outcomes acceptable (87% of customers said this) and felt they matched their own views (87% said they closely/somewhat closely matched their views). All outcomes were considered important. Reflecting previous Acceptability research, **safe clean water was considered most important** (97% of customers felt this was important), **followed by supply meets demand** (93%), **fair charges** (92%), **satisfied customers** (91%), **and resilient services** (86%). **Fair profits was considered least important** (67%).

Customers who took part in the online community also reacted positively to Anglian Water's ten outcomes. Customers felt the outcomes created the impression of a proactive organisation that is actively trying to improve itself across all aspects of its network and service. Students at the three future customer workshops in which the outcomes were discussed were generally supportive of them and felt they covered the most important areas the company should be focusing on. At one workshop, students pointed out that many of the outcomes overlapped and were inter-connected.

In the acceptability research, customers were introduced to **Anglian Water's seven water quality and customer satisfaction goals** (zero pollution and flooding, zero leakage and bursts, 80 litres of water per person per day, 100% complaint and chemical-free drinking water, 100% customer satisfaction, energy neutrality, and a circular economy). The vast majority of customers felt the goals were acceptable (91%) and closely or somewhat closely matched their own views (87%). Achieving **100% compliant and chemical-free drinking water was considered the most important goal** (95% of customers felt this was important), followed by **zero pollutions and flooding** (93%) and **zero leakage and bursts** (92%). The **80 litres per person a day goal was considered least important** (68%).

In the acceptability research, customers were introduced to **Anglian Water's four, stretching long-term goals** (enabling sustainable economic and housing growth, making the East of England resilient to drought and flooding, becoming a carbon

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neutral business by 2050, and better serving customers through digital transformation). Uninformed acceptability of the four goals was high (83% of customers). This rose with more information (to 88%), with the biggest shift in the "protective provincial" group who were previously the least positive. Among the 8% of customers who felt that one of the goals should be excluded, the **most popular goal to exclude was digital transformation** (49%) and **least popular was resilience** (20%).

These findings appear to be confirmed in the online community trial, when customers were asked to rank Anglian Water's four key ambitions. Making the East of England **resilient from drought and flooding was voted the number one priority** by two thirds of those who took part. Customers felt this was an issue that was likely to affect everyone in the region on a personal level. Mitigating drought and flooding was seen to be especially important in light of the pressure on infrastructure associated with the long-term growth agenda.

When (five of) Anglian Water's retail customers were asked to prioritise between the company's four long-term ambitions (with digital transformation now replaced by improvements in ecological quality across the company's catchments), some assigned equal priority to several of the ambitions. However overall, **resilience was prioritised** once again, just ahead of sustainable growth, and improvements in ecological quality. Reflecting other research, "becoming a carbon-neutral business by 2050" was ranked last.

In the "100 homeworks" initiative, parents and school children also **reacted positively to the company's long-term ambitions**. Seventy five percent (33) of adults and 63% (29) of children agreed these were the right ambitions. (However, note, this was not robust quantitative research). The comments provided suggest that both parents and children approve of the company taking a long-term perspective and planning ahead.

The Main Stage Willingness to Pay research suggests that customers think all of the attributes tested in the survey (relating to water, sewerage and wider services) are important. In relation to water services, tap water aesthetics (discolouration) and unplanned interruptions were the most important attributes for household customers (61% said these were very important), just marginally ahead of leakage (60%), and rota cuts (56%). Non-household customers also felt the most important attribute was tap water aesthetics (61%), followed by interruptions (57%), rota cuts (55%) and leakage (53%). In relation to sewerage services, household customers prioritised sewer flooding, with 61% saying both internal and external flooding were very important. Sewer flooding was also prioritised by non-household customers (57% internal and 56% external). In relation to wider aspects of the service, household customers prioritised customer **service** (57% saying this was very important), followed by river water quality (55%) and pollution (54%). In comparison to household customers, non-household customers placed more emphasis on customer service (57% said this was very important) relative to pollution incidents (50%) and river water quality (46%).

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Reflecting generally positive views of Anglian Water's performance, most household respondents opted to **maintain current performance levels** for water services (between 60%-72% depending on the attribute). For those that indicated that service levels should improve, the **priority was reducing leakage** (32%). Maintaining current performance was also the majority view for sewerage services (between 59%-65%), with approximately one in three wanting to see better performance for internal sewer flooding (33%), bathing water quality (32%) and external sewer flooding (31%). There was a similar pattern for wider services, with between 54%-67% wanting to maintain current service levels, depending on the attribute. Compared to water and sewerage services, however, slightly more respondents wanted to see improved performance in these areas, especially in **river water quality and pollution incidents** (both 37%).

Non-household customers also viewed **leakage as the priority for improvement** in relation to water services, with 42% opting to improve performance and just 41% opting to maintain it. Unplanned interruptions were also rated higher (30%) than discolouration (23%) and rota cuts (21%) as an improvement priority. For sewerage services, roughly equal proportions of non-household customers opted to maintain (48%-56%) and improve service levels (31%-38%), with sewer flooding rated marginally higher as a priority for improvement than other issues (38% external, 36% internal). For wider services, responses are again relatively balanced, with respondents prioritising **improvements in river water quality (48%) and pollution incidents (47%).** This is in contrast to the pattern in household responses, where the largest proportion of customers opted to maintain current performance in these areas.

In selecting a package of improvements relating to the water service, the Willingness to Pay (DCE) choice task indicates that household customers gave the greatest weight to leakage (26%) and change in the bill (24%), while nonhousehold customers placed the greatest weight on leakage (29%) and severe water restrictions (22%), with less weight given to change in the bill (19%). In relation to sewerage services, household customers placed the greatest weight on sewer flooding inside properties (27%) and bathing water quality at beaches (22%), which were also given the greatest weight by non-household customers (though a more equal 25% for both attributes). In relation to wider services, both household and non household customers placed greatest weight on river water quality (29% for households and 36% for non households) and pollution incidents (28%for households and 33% non-household customers).

Overall, the Main Stage Willingness to Pay survey suggests customers generally prioritise improvements that have a wider impact across the region (e.g. leakage, river water quality, and pollution incidents). It also suggests that customers have a strong preference for avoiding deterioration in service levels, especially in relation to environmental outcomes (e.g. bathing water quality, river water quality and pollution incidents) and aspects of service that have a high and direct impact on customers, such as sewer flooding (inside properties), and severe water restrictions (rota cuts).

Topic Area & Customer Evidence

When participants were asked for the reasons for their responses in the choice task, the most commonly reported rationale for householders and the second most common for non-household customers was value for money – i.e. that they opted for the most improvement relative to cost (household DCE survey 19%, BWS survey 21%, non-household survey 15%). The most common rationale provided by non-household customers (17%) was that they had opted for packages that provided improvements in those service attributes that they felt were particularly pertinent. This reason was slightly less important to household customers (DCE 10%, BWS 14%). Selecting options that had the most direct benefit was the second most important choice for household customers (DCE 15%, BWS 16%). This was also important to non-household customers (12%). Choosing options with the least associated cost was also a prominent motivation for household customers (DCE 18%, BWS 10%) and non-household customers (8%).

Respondents to the Willingness to Pay survey who mainly opted for the 'no change' options in the choice task were asked a follow up question about their reasons for this. Feedback suggests that most status quo choices were largely based on motivations related to satisfaction with current service levels or to affordability (57% for DCE and 46% for BWS household respondents, and 52% for non-household respondents). While protest-type responses (related to the cost of water bills, company performance and profits) drove a sizeable minority of status quo choices for both types of respondent (between 34%-41%), the study authors conclude that overall this relates to relatively small numbers of customers.

Disaggregated results for Hartlepool Water household customers from the Main Stage Willingness to Pay survey suggest that there is very little difference in attitudes among these customers in terms of the importance of various water service attributes. Consistent with high satisfaction levels among Hartlepool Water customers, the majority (approximately 85%) indicated that the priority should be to maintain current service levels. Leakage was the area that the greatest proportion of Hartlepool Water respondents identified for improvement (16%). The choice model analysis indicates that the level of leakage and change in the bill were also the most important aspects of the choice task for Hartlepool Water household respondents. Overall, the profile of results for Hartlepool Water is similar to the pooled Anglian Water results, indicating that Hartlepool Water customers' priorities are aligned to those for the wider Anglian Water region. Only "severe water restrictions" has a noticeably reduced level of importance for Hartlepool Water customers.

In the Water Resources Second Stage research initial "package" exercise, household respondents allocated the greatest percentage of the bill impact to dealing with complaints about the aesthetics of tap water, followed by leakage, and interruptions. The service areas with the lowest allocations were smart meters, internal sewer flooding, and security of supply (or drought restrictions). Non-household customers allocated the highest percentages to leakage, and then (depending on the version of the survey) to security of supply

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(drought restrictions), and interruptions. The service areas with the lowest allocations for these customers were smart meters and internal sewer flooding.

Respondents were asked for the reasons for their choices in the package exercise. For both household and non-household customers, the key reasons for choosing the improved package were that the bill increase was affordable, and a desire to protect the environment and deliver improvements, particularly in water services (which appear to be a more important driver than waste services). Among household customers, the key reason for rejecting the package was a concern with higher bills, followed by the idea that water companies already make enough profit, and a belief that the water company should pay. Non household customers shared these views, although the idea that the water company already makes enough profits was their top choice.

Quite a few pieces of evidence from this wave of research and engagement suggest that there may be systematic differences in the way that different groups of customers prioritise issues, and that this may influence their willingness to pay for improvements.

For example, the segmentation research found some **clear differences in customers' willingness to pay more to subsidise others.** While 17.9% of customers across the whole sample strongly agreed that they were willing to do this (answering 9 or 10 where 10 is strongly agree), 28.8% of the "comfortable and caring" group and just 9.4% of "protective provincials" felt this way.

The study combining Anglian Water's customers' subjective preferences with their Willingness to pay for river water improvements revealed **significant differences in respondents' choice behaviour, attributable solely to their subjective preferences**. The study authors suggest that the five viewpoints outlined in the research provide plausible explanations for respondents' choice behaviour and their willingness to pay for river water quality improvements. They highlight that the most striking feature of their analysis is the **influence subjectivity has on respondents' willingness to choose options featuring increased prices**.

Results from the "package" exercise at the start of the Water Resources Second Stage Survey found (perhaps unsurprisingly) that customers from the **highest socio-economic grade (AB) had a higher willingness to pay for improvements**. It also found that a combined grouping of "comfortable and caring", "family first" and "tech savvies" had a higher willingness to pay than the base group of "protective provincials" and "eco-economisers".

However, the Main Stage Willingness to Pay survey found that overall (for the majority of the attributes that were tested) **most customer groups' willingness to pay** (analysed by income, receipt of special tariffs, age, socio-economic group, disability and Anglian Water customer segment) **lies within the bounds of the average willingness to pay result.** While lower and higher values were observed across the groupings, these were largely consistent with the lower and upper interval estimate of the average results. Moreover, unit values for each socio-

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economic and income group were in line with prior expectations – i.e. lower income was associated with lower willingness to pay.

The acceptability research on Anglian Water's performance commitments and outcome delivery incentives (ODIs) found that the vast majority of household participants (74%) found all the compulsory performance commitments clear and understood what they meant. Ninety four percent of household customers felt that some or all were clear, with 99% of non-household customers saying the same. For those customers that didn't understand all of the commitments, this was generally related to clarity of language or a desire for more information, rather than a specific issue with a particular commitment. In particular, household customers were keen for Anglian Water to clarify what is meant by "assets", and "asset health". The same proportion of household customers felt that all Anglian Water's bespoke performance commitments were clear and easy to understand (74%). Ninety two percent felt all or some were clear. The corresponding result for non-household customers was 94%.

These findings appear to be confirmed in the acceptability research on the outline business plan. The vast majority of customers understood the water measures (89%-98% for household and 94%-100% for non-household customers). Understanding was the lowest for the abstraction incentive mechanism (AIM) and compliance risk index (among both types of customer). The vast majority also understood the recycling measures (88%-98% for household and 96%-100% for non-household customers). Understanding was lowest for embodied carbon (for both types of customer). Understanding of customer service measures was also very high (94%-98% for households and 96%-100% for non-households). Understanding was lowest for the customer measure of experience (C-MeX, for both types of customer).

The consultation feedback (from customers on the online community) found that, overall, participants supported Anglian Water's draft PR19 plan. Customers were reassured that leaks and bursts were being addressed (a top priority issue for them). They were also confident that the company is incorporating a greater focus on environmental protection and on resilience. Overall, participants accepted that proposed bill increases were justified by the additional "future proofing" measures set out in the plan. Reviewing the plan reassured customers that Anglian Water has thoroughly planned for the next five years. Customers acknowledged that doing so involves a complex balancing act, as Anglian Water is bound by regulation, needs to balance profit with fairness, and is tackling serious resource pressures resulting from increased demand and potentially reduced supply.

These results appear to be confirmed in the third wave of the acceptability research, which tested the outline business plan with a representative group of customers. In this research, uninformed acceptability of the outline plan among household customers was 74% (% finding the plan either very acceptable or acceptable). This rose to 80% on being informed. Hartlepool Water customers were significantly more likely to say the plan was very acceptable

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than other customers (when both uninformed and informed). Customers in the "eco-economiser" and "protective provincial" segments were significantly more likely than customers from all other segments to say the plan was very unacceptable (when both uninformed and informed).

In the same research, acceptability of the outline business plan among non-household customers was also high, and rose (from 78% to 85%) on being informed. Businesses with high annual water consumption or large bills were significantly more likely to say the plan was very unacceptable than those with low consumption or small bills (when uninformed). Customers in the "energy or water supply and service" sector were significantly more likely to say the plan was very unacceptable than those in the "wholesale and retail" or "government, health and education" sectors (again, when uninformed).

Quotes set out in the report of the third wave acceptability research suggest that factors driving acceptability include: trust in Anglian Water; a perception that the company has identified the right issues to focus on; and a sense that Anglian Water is aiming for excellence or "setting the bar high". Quotes suggest that drivers of unacceptability include: costs; a perception that Anglian Water should have invested more and taken less as profit in the past; a concern that future bill increases will support profit not improvement; and a sense that the company is being very ambitious and may not have the resources to achieve it all.

In the acceptability testing on the company's performance commitments and ODIs, household customers placed the **highest importance on external sewer flooding** (73% saying this was of high importance to them), **followed by vulnerable customers** (67%). The lowest importance was given to the abstraction incentive mechanism (AIM) and to gaps and voids (both 27%). Non-household customers' ratings followed a similar pattern, with the highest importance again given to external sewer flooding (85%) and vulnerable customers (70%), and the lowest importance to gap sites and voids (32%).

The consultation feedback on the draft plan with the online community found that when there was a choice about investment, customers generally prioritised areas that were regarded as central to the service, that impact directly on customers, and that help protect the environment (echoing findings from other research, such as the Willingess to Pay Study). Top priority issues were burst water mains and sewer flooding, as these were thought to impact most on customers in terms of disruption and cost. Treatment compliance was regarded as important, but also as a fundamental expectation of the company anyway. Of lesser importance were issues such as low pressure and asset outages, as they were felt to be of lower risk or lesser impact on customers. However, customers were reassured to see improvements across a wide range of areas, including: safeguarding (full compliance with quality and safety standards and a focus on a continuing service in the event of drought); network improvements (fixing leaks and bursts and addressing pollution); and new environmental ambitions (e.g. with respect to bathing water quality and natural capital).

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Reflecting these findings, in the acceptability testing on the outline business plan, water mains bursts were again rated most important of a list of service areas, followed by sewer collapases (by both household and nonhousehold customers). Mains bursts also emerged as the water measure rated of high importance by the largest proportion of household customers (82%), followed by leakage (on 68%), and the largest proportion of non-household customers (81%), followed more closely by leakage (on 79%). Among household customers, unplanned outages were rated as of high importance by just 37% of household customers and the AIM by the lowest proportion (36%). Among non-household customers, the lowest ranking water measures were the AIM (45%) and low pressure, single supply, and per capita consumption (all on 44%). Of the recycling measures, sewer collapses emerged as the issue of high importance to the greatest number of household customers (87%), followed closely by pollution (86%). These results were reversed for non-household customers (pollution ranking top on 87%, followed closely by sewer collapses on 85%). Both types of customer ranked embodied and operational carbon of lowest importance (31% and 25% for households and 30% and 31% for non-households). Turning to retail measures, both types of customer ranked support for vulnerable customers highest (79% of households and 67% of non-households ranked this of high importance), while households ranked non-household retailer satisfaction last (28%), and non-households ranked managing void properties last (33%).

As has been the case in other research, the consultation feedback on the draft plan with customers from the online community identified some **differences in priorities among different customer groups.** For example, the "family first" and "tech savvy" groups were particularly interested in how Anglian Water will be supporting them and their children to save water and protect the environment. The "comfortable and caring" and "eco-economiser" groups were most interested in Anglian Water's plans to protect the environment and their local area. The "protective provincial" and "careful budgeter" group were most concerned about customers having to "foot the bill" for improvements, and were interested in hearing more about how Anglian Water are making efficiencies to ease the financial burden on customers.

Differences between groups of customers were confirmed in the acceptability research on the outline business plan. For example, customers in the "protective provincial" segment were significantly more likely than "tech savvies" to rate leakage as of high importance. Customers in the "comfortable and caring" segment were significantly more likely than "tech savvies" and "family first" segments to rate support for customers in vulnerable situations as of high importance. Differences were also found for business customers. For example, high water consumption companies were significantly more likely than low consumption companies to rate the AIM as of low importance.

Differences were also found in the acceptability testing on the company's performance commitments and ODIs. For example, household customers in the "comfortable and caring" and "eco-economiser" segments were more likely to

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attribute higher importance to all the performance commitments than other segments. "Tech savvies" were least likely to attribute high importance to the commitments. Non-household customers were also more likely to rate all the performance commitments more highly than household customers.

Despite general support for the draft PR19 plan, the process of consulting on it with the online community revealed that some (household) participants felt they lacked the expert knowledge to determine whether a particular ambition was stretching or not. Finding out about the plan often created more questions that participants didn't know they had. Participants were particularly keen to know more about: the impact of plans on customers (e.g. how Anglian Water will support them to reduce their use, the customer benefits of advanced metering, and how Anglian Water will guarantee bills won't go up again); outcomes and targets (especially how incentives and penalties work); billing scenarios (what efficiencies are being delivered to help reduce the customer bill, why more isn't being paid for by shareholders, and what developers will be funding); and the consultation itself (what impact this will have on the plan).

The acceptability research on the outline business plan adds further nuance to these findings. It found that **most customers felt the water targets were sufficiently stretching** (between 63% and 82% of all household customers and 69%-95% of all non-household customers, depending on the measure). Among household customers, agreement was lowest in relation to AIM (65%), mains bursts (65%), unplanned outages (64%) and the compliance risk index (63%), and among non-household customers for mains bursts (69%), unplanned outages (71%), reactive mains bursts (76%) and AIM (78%). However, **household customers who understood the measures were significantly more likely than non-household customers to say they didn't know if the targets were sufficiently stretching** for seven of the water measures (including mains bursts and unplanned outages). **Non-household customers who understood the measures were significantly more likely than household customers to say the targets were stretching** for five of the water measures.

Most customers felt the water recycling targets in the outline plan were sufficiently stretching (between 53%-74% of all household and 59%-90% of all non-household customers, depending on the measure). Among household customers, agreement was lowest in relation to internal sewer flooding (53%), external sewer flooding (54%) and risk of sewer flooding in a storm (55%), and among non-household customers for internal sewer flooding (59%) and external sewer flooding (61%). However, household customers who understood the measures were significantly more likely than non-household customers to say they didn't know if the targets were sufficiently stretching for six of the water measures (including external sewer flooding). Non-household customers who understood the measures were significantly more likely than household customers to say the targets were stretching for four of the the recycling measures.

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In the same research, most customers felt the customer service targets in the outline plan were sufficiently stretching (between 62%-73% of all household and 77%-90% of all non-household customers, depending on the measure). Among household customers, agreement was lowest in relation to the customer measure of experience (62%), and among non-household customers for the developer measure of experience (77%). However, household customers who understood the measures were again significantly more likely than non-household customers to say they didn't know if the targets were sufficiently stretching (for all of the measures). Non-household customers who understood the measures were again significantly more likely than household customers to say the targets were stretching for: the customer measure of experience (CMeX), and supporting customers in vulnerable situations (priority register and the panel).

In the consultation feedback (with customers from the online community), a few specific elements of the plan stood out to participants as being particularly exciting. These were plans for: advanced metering (suggesting a shift towards greater availability of data to help both customers and Anglian Water to manage water more effectively in future); the creation of a "water grid" (involving greater collaboration and sharing between water companies to help meet customer expectations); and plans to improve bathing water quality (which participants felt would be of direct benefit to customers).

AII

Engaging with customers

What we already know (as at June 2016)

Qualitative research and engagement activities indicate customers and stakeholders recognise the challenges involved in **communicating with a large and diverse customer base**, over a substantial geographical area. Participants suggest the company utilises a **wide range of channels** to get information across, including: more and better information with the bill; radio, TV and newspaper ads and articles; an accessible website presence; specific campaigns; a more visible presence in the local community; and effective communication through stakeholders and trusted third parties.

There has been a range of **feedback on research and engagement** activities themselves. Much feedback has been positive; there have also been some criticisms. Feedback about participation in face-to-face activities has been particularly positive; participants found focus groups and customer events interesting and enjoyable, as they had a chance to interact and share ideas with other customers, as well find out more about the company. Some participants expressed concerns about the coverage and detail of information provided to them in the consultation document and/or the phrasing of specific questions. Some participants are also **sceptical about the influence** their views will have on the company; there is a desire to see a clear link between propositions in the business plan and customer and stakeholder views.

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There is some **interest in a continuing dialogue** with the company as the business plan shapes up; findings from the consultation suggest particular interest in more focused debate about the topic of catchment management.

Participants in qualitative research and engagement activities, particularly stakeholders at the Joint Panel meeting, emphasised important areas of **overlap between different outcomes** and aspects of the service; they wanted these interdependencies to be reflected in the plan.

What's emerging (Autumn 2016 onwards)

There has been greater investment in **co-creating the current engagement strategy** (with customers and staff) than was the case for the engagement strategy for PR14. Findings from the strategy development process and a range of other pieces of work recently commissioned by Anglian Water suggest that it will not be straightforward to create a meaningful dialogue with customers given the pressures many are experiencing in their lives and the competing demands on their time and attention.

The customer world focus groups identified that **engagement is more likely to be successful if the company**: acknowledges the challenging circumstances that many customers are experiencing; makes it feel easy; ensures content is relatable to people's lives now; is honest; and demonstrates leadership (showing what the company is already doing, rather than pushing further responsibilities on to customers).

Evidence from the customer world focus groups suggests it is **not likely to be helpful to use climate change as a starting point** for conversations, or to frame questions or initiatives in the very long-term. The co-creation workshops also found that while "gross out" issues (such as sewer flooding) struck a chord with people, customers don't want to be "fear-mongered" at a time when they are already anxious and concerned about many other issues.

Evidence from various strands of activity, including the H2OMG festival, suggests that it is more difficult to engage customers in discussions on some of the 10 outcomes than others. Overall, it seems to have been particularly challenging to engage customers in discussions about the outcome on Fair Profits. Findings from the Community Perception Survey (year three, wave one, August 2017) suggest that most customers are less interested in issues relating to the internal workings of the company (e.g. financial performance and employees), and more interested in issues such as bills and affordability (the top choice, of interest to 53%), the water supply, the environment, water resources, water recycling and customer service (which they may feel affect them more directly). That said, some of the future customers who took part in focus groups appeared to be quite interested in the internal workings of the company.

Feedback on the Willingness to Pay survey suggests that respondents tended to find it easier to compare service levels between alternative packages (in the DCE survey) than between different service areas (in the BWS) survey. The study authors conclude that this may reflect the fact that in the BWS survey, service attributes were mainly described in terms of overall service levels across

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the company region, rather than as 'private goods' that may impact directly on respondents' day-to-day activities.

On a similar theme about the presentation of data, the research that explored the draft PR19 busines plan with customers in vulnerable circumstances found that because of the variation in the level of bills in the group, participants had to work a little **harder to relate to the bill profile examples** used (which were based on average bills). The online activities on sewerage rehabilitation also found that when the company's achievements were **presented in absolute numbers** (e.g. kilometers of pipes fixed), this made a positive impression on customers, however when they were **presented as percentages** (e.g. 0.04 of the network fixed), this felt "alarmingly low".

The online activities on WINEP (Water Industry National Environment Programme)/natural capital found that case studies were a really good way of engaging customers and bringing the issues to life for them. Participants were keen to see more of such information in future.

Findings from a range of pieces of work recently commissioned by the company confirm that **future engagement needs to be carefully tailored** to "speak directly" to different groups of customers. The authors of the segmentation study, for example, suggest that in engaging with the 26% of the customer base that it identifies as "comfortable and caring" it will be important to recognise their altruistic tendencies, focus on the benefits to the community, and give clear information about initiatives, including transparency about where money is spent. In engaging the 11% of the population that the research identifies as "careful budgeters", it will be helpful to focus on finances, recognise their budgeting expertise and offer them some practical tools to help them manage their water use and expenses.

Research carried out for the strategy development process identified that **SMEs** are likely to be particularly tough to engage, as Anglian Water is only a very small part of their world. However, these customers are likely to appreciate email communication that feels relevant. Heavy users of water tend to report good relationships with their Anglian Water client manager, the natural conduit for information from the company. However, the research found that these users are increasingly pressed for time and are heavily communicated with at the moment.

Focus groups carried out for the strategy development process indicated that **staff** are keen to play a greater role in engagement activities in future. Some felt that the company was not currently making the most of its frontline staff to engage customers in wider debates. Others felt there were opportunities to use assets such as water parks as a launch pad for engagement. The website and lack of system integration were identified as key blockers to better customer engagement.

Findings from the online community trial suggest that customers feel Anglian Water's **four major goals are very "big picture"**. They want to know more about how these goals will be achieved in practice. In addition to knowing what Anglian Water think are the solutions, they want to know more about how Anglian Water can exert influence over others and the wider environment (e.g. over planning

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strategy and developers' practice etc). Customers also felt that some of the terms used to describe the company's goals were unclear, or jargon-heavy.

Similarly, the Acceptability research on the Strategic Direction Statement found that some customers **didn't understand certain aspects** of the seven water quality and customer satisfaction goals. This was particularly the case for the 80 litres per person per day and circular economy goals. Some customers also felt that the **outcomes were vaguely worded and aspirational**; they wanted more detail on plans, targets and milestones.

The online community suggests that there may be some **differences in opinion about these issues** across different customer segments. For example, while "tech savvies" are interested in the "big picture" and overall vision for the future, "eco-economisers" want to hear more about the detail, with a clearer focus on achievable goals.

As highlighted above, in the consultation feedback on the draft PR19 plan, some participants felt they lacked the expert knowledge to determine whether a particular ambition was stretching or not. The notion of a "deadband" that acts as a buffer was also sometimes interpreted as a reason not to need to meet the target. Overall, finding out about the plan often created more questions that participants didn't know they had. Participants were particularly keen to know more about: the impact of plans on customers (e.g. how Anglian Water will support them to reduce their use, the customer benefits of advanced metering, and how Anglian Water will guarantee bills won't go up again); outcomes and targets (especially how incentives and penalties work); billing scenarios (what efficiencies are being delivered to help reduce the customer bill, why more isn't being paid for by shareholders, and what developers will be funding); and the consultation itself (what impact this will have on the plan). The acceptability testing on the outline business plan also found that household customers (in particular) often found it difficult to know if targets were sufficiently stretching.

Despite these issues, feedback from a range of activities suggests that customers have **enjoyed taking part in research and engagement and have found it interesting and informative**. As an example, participants in the research that tested the draft PR19 business plan with customers in vulnerable situations said they found the "what your bill pays for" handout particularly interesting, as it gave them a quick overview of where their money goes. They were keen to see this information from Anglian Water on a more regular basis.

Evidence from several strands of activity suggests that **customers have changed their views** about the substantive issues as a result of their involvement. The programme of research and engagement also seems to have **raised the profile and reputation of Anglian Water** as a forward-thinking and proactive company that cares about the communities it serves, and is committed to having an ongoing dialogue with its customers.

In addition to the **large number of people who have participated** in the specific research and engagement activities discussed in this report, the analysis of social and digital media suggests that a very large number of people have been exposed

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to online content referencing the company. This was estimated at 6.3m between 1st February 2017 and 31st January 2018, with 26.3K comments posted which mentioned the company. Seventy-nine percent of this content originated from consumer-led platforms (blogs, Facebook, forums, Instagram, and Twitter), with 57% driven by engagement with @Anglian Water on Twitter. Ipswich, Cambridge and Colchester were hot spots for customer social media engagement (19%, 13% and 10% of all engagement, respectively).

All

Satisfied Customers

Overall satisfaction

What we already know (as at June 2016)

Evidence from multiple sources (both quantitative and qualitative) suggests most household and business customers are satisfied with the current water and wastewater service. For example, in the latest Consumer Council for Water Annual Tracker survey (for 2014) 93% of Anglian Water household respondents said they were satisfied with their water supply and 91% were satisfied with their sewerage service. Ninety eight percent of Hartlepool Water respondents were satisfied with their water supply, and 98% were satisfied with their sewerage services

To put the above figures into context, the Water Matters survey of households in England and Wales found that in 2014 94% of customers were satisfied with their water service and 91% were satisfied with their sewerage service. The July 2015 Customer Satisfaction Index survey ranks utility companies in terms of customers' overall level of satisfaction. Anglian Water received a score of 71.1 in the 2015 survey, which is a slight decrease compared with the 2014 result of 72.6. Anglian Water is ranked number 12 from the top out of 17 utilities companies.

The Business to Business Customer Satisfaction survey (2015) found that overall satisfaction with Anglian Water Business is high, with almost three quarters (74%) quite or very satisfied with the service. This was a slight improvement on the previous two waves (wave one: 70%; wave two: 71%). Account managed contacts were significantly more likely to be very satisfied than those who had a support coordinator.

The Willingness to Pay and Consumer Council for Water Annual Tracker surveys suggest that the aspect of the water service that customers are least satisfied with is the **hardness of their tap water**. (However, qualitative research and engagement suggest many customers recognise this is a feature of the local water environment. The Domestic Customer Survey finds opinion divided about whether further investment is needed in this area). The aspect of the wastewater and environmental service that customers are least satisfied with is the **number of incidences where untreated sewage pollutes rivers**.

There appear to be some **geographical differences in satisfaction**. For example, the PR14 Willingness to Pay Survey suggests that, among

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household customers, Hartlepool Water respondents are the happiest with the current water service and, on most dimensions, Cambridge Water respondents are happiest with wastewater and environmental services.

The Acceptability research suggests business customers with light water usage (30%) are significantly more likely to be 'very satisfied' than those with heavy usage (17%). Satisfaction was lower among vulnerable customers, although 70% still said they were satisfied.

Analysis of the SIM Tracker Survey 2014/15 found eight key **drivers behind overall satisfaction** results, with the top three most important factors found to be: being kept informed; the time taken to resolve issues; and overall visit satisfaction. Participants who took part in deliberative events suggested that while **100% customer satisfaction** is a very positive ambition, it may not be achievable in practice.

Evidence from qualitative sources suggests service problems are fairly infrequent. Among respondents to the PR14 Willingness to Pay Survey, 40% of household customers and 44% of non household customers had experienced no problems in the past five years. The Acceptability research suggests that infrequent experience of problems was the main reason for high levels of satisfaction.

The PR14 Willingness to Pay Survey indicates that the **most common problems** for both types of customer relate to the aesthetic quality of water (taste, odour, discolouration), leaks, notified interruptions to supply (and, for household customers unexpected interruptions to supply, and for businesses, billing related problems).

What's emerging (Autumn 2016 onwards)

Findings from research and engagement activity in this wave confirm that customers are **generally satisfied** with the service.

The latest figures from the CCWater Water Matters research (2017/18) suggest that 94% of household customers were satisfied with their water service (n=399). The range for all water and sewerage companies was 86%-96% (with a weighted average of 91%). Overall satisfaction with sewerage services for the same period was 89% (n=369), with the range for all combined service companies between 82%-92% (and a weighted average of 87%). Figures suggest an **upward seven-year trend in satisfaction with sewerage services**.

bartlepool water suggests overall satisfaction with the service is also high. In the latest set of figures (2017/18) satisfaction with water services was 93% (n=150). The range for all water-only companies was 87%-97% (with a weighted average of 92%). Figures suggest a downward trend in satisfaction among Hartlepool Water customers since 2014/15.

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Evidence from the Main Stage Willingness to Pay survey also found that, overall, most household customers were satisfied with their water and sewerage services, with 78% saying they were 'very satisfied' or 'fairly satisfied'. Only 7% said they were dissatisfied (either very or fairly), while 15% gave more equivocal responses (n=1353, all subsamples, DCE and BWS survey). Similarly, the majority of non-household customers (70%) said they were either 'very satisfied' or 'fairly' satisfied'. As was the case for householders, just 7% of non-household customers said they were dissatisfied, however slightly more gave equivocal responses (22%, n=500, all subsamples, DCE survey).

hartlepool—Disaggregated results from the Main Stage Willingness to Pay survey for Hartlepool Water household customers suggest that a very large proportion of these customers were satisfied with the company's performance for water services (over 92% regarding it as "satisfactory" or "somewhat satisfactory"). This result was confirmed in both the co-creation events and the focus group with Hartlepool Water customers.

In the (DCE) version of the Willingness to Pay survey, customers were presented with some comparative information showing Anglian Water's current service levels relative to other water and sewerage companies in England and Wales. They were then asked to rate different aspects of Anglian Water's performance. The results suggest that household customers are broadly satisfied with different dimensions of the water service, with the majority rating performance for leakage (75%) discolouration (79%), rota cuts (78%) and unplanned interruptions (76%) as either 'satisfactory' or 'somewhat satisfactory'. An average of 13% gave equivocal responses, and just 7% said performance was unsatisfactory or somewhat unsatisfactory (n=550, combined and water only subsamples). There was a similarly positive view of Anglian Water's performance in relation to sewerage services, with around two in three household customers (68% on average) rating this as either 'satisfactory' or 'somewhat satisfactory'. Compared to water services, neutral responses were slightly higher for sewerage services (between 16%-18%). On average, just 9% felt performance was unsatisfactory (n=558, combined and sewerage only subsamples). The majority of household respondents also found Anglian Water's performance for wider service areas to be 'satisfactory' or 'somewhat satisfactory' (67% for customer service, 62% for pollution incidents, and 59% for river water quality). However, 16% were unsatisfied with river water quality, 11% with pollution incidents and 8% with customer service (n=542, combined and sewerage only subsamples).

The Willingness to Pay (DCE) survey suggests that non-household customers are also broadly satisfied with different aspects of their service, however rates of satisfaction are lower than for household customers. In relation to water services, the majority of non-household customers rate performance for leakage (57%) discolouration (67%), rota cuts (58%) and unplanned interruptions (58%) as either 'satisfactory' or 'somewhat satisfactory'. Equivocal responses (an average of 18%) and negative responses (an average of 19%) were higher than for household customers (n=253, combined and water only subsamples). In relation to sewerage services, on average 55% of non-household

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customers were satisfied with the service (again, lower than the 68% figure for household customers). Dissatisfaction was highest with sewer flooding to external areas (23%, n=349, combined and sewerage only subsamples). The majority of non-household respondents also found Anglian Water's performance for wider service areas to be 'satisfactory' or 'somewhat satisfactory': 52% for customer service; 50% for pollution incidents; and 52% for river water quality (n=346, all subsamples).

In the BWS version of the household Willingness to Pay survey, customers were asked an alternative question about the aspect of the current service or performance that was best and worst. In relation to water services, rota cuts were recognised by the largest proportion of respondents as the best level of service (36%), and by the minority as the worst (15%), followed by unplanned interruptions (30%) and discolouration (21%). Leakage was considered by most respondents to be the worst aspect of the water service; only 13% felt it was the best and 41% felt it was the worst (n=301, combined sample). Interestingly, the authors point out that Anglian Water is a top performer for both discolouration and leakage, and 'middle of the road' for unplanned interruptions, suggesting that customers have more nuanced views on company performance than simply how a company ranks relative to its peers. For sewerage services, performance for internal sewer flooding was rated best by a large majority of respondents (57%), followed by odour from sewerage treatment (24%). External sewer flooding was rated worst by the majority of respondents; 52% rated this as worst and only 19% as best (n=301, combined subsamples). The largest proportions of respondents selected customer service (42%) and bathing water quality (31%) as the best performing aspects of Anglian Water's wider services, with river water quality (43%) and pollution incidents (32%) as the worst (n=301, combined subsamples).

Possibly driving high rates of satisfaction, the Willingness to Pay survey found that the majority of household customers had not experienced any problems with their water or sewerage services in the last five years (72%). For those that had, an issue with the water supply was the most commonly experienced problem (15%). Eight percent of household customers had experienced a problem with their sewerage services in the same period. Just two percent had experienced concerns about the quality of local water bodies, and 2% had experienced problems with customer services or billing (n=1353, all subsamples, DCE and DWS surveys).

A total of 220 household respondents reported experiencing a problem with their water service. Of these, the most commonly cited problems were a concern about the aesthetic quality of tap water (taste, smell or appearance) or hardness (53% or 116 respondents for both). This was followed by one-off low pressure incidents (33%, 72 respondents), and supply interruptions without prior warning (32%, 71 respondents). Twenty five percent of these respondents had experienced an interruption with prior warning, 19% a leak in the street, 17% low water pressure all the time, and 5% had received a boil notice. (Combined and water only subsamples, DCE and BWS surveys).

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Overall, 113 household respondents cited sewerage service issues. Of those, sewer flooding inside the home was the most commonly experienced problem (66%, or 75 respondents), followed by a blocked drain on or near their property (49%, 55 respondents), and odour from sewage treatment works (39%, 44 respondents). Of the 113 respondents, 20% had experienced external sewage flooding in public places near a property and 15% had experienced it in a garden or drive.

The Willingness to Pay survey indicates that **fewer non-household customers had experienced no problems** with their service in the past five years (55%). For these customers, **problems with the sewerage service (14%) were as common as those with the water service (15%).** A small proportion of non-respondents reported concerns about the quality of local water bodies (5%) and customer services (5%, n=500, all subsamples, DCE survey).

For the 81 non-household customers who had experienced a problem with their water service, concerns about the aesthetics of water were also the most common issue (75%, 61 respondents), followed by occasional low pressure (37%), and planned (35%) and unplanned (33%) interruptions. Twenty two percent of these respondents had experienced constant low pressure or a leak in the street. Twelve percent had experienced a boil notice.

Among the 74 non-household customers who had experienced problems with their sewerage services, a blocked drain was the most commonly experienced problem (55%, 41 respondents), followed by sewer flooding in public places (26%, 19 respondents), and inability to flush a toilet (22%, 16 respondents). Twenty percent of the 74 non-household customers had experienced a problem with sewer flooding inside premises and 18% outside.

Disaggregated results from the Main Stage Willingness to Pay survey for Hartlepool Water household customers also found that the vast majority (91%) had not experienced any service disruptions.

The Water Resources Second Stage research also found that in the **majority of cases**, household customers had never experienced any service issues. A hosepipe ban was the most commonly experienced issue (with 57% of respondents saying they had experienced this at some point), however there were mixed views about how recently a ban had occurred. **Low pressure was the most recently cited experience** (21% experiencing this in the last year), followed by **supply interruptions** (13%), **issues with the look, taste, or smell of tap water** (13%), **visible leaks** near or outside the home (12%), and **odour** from sewerage treatment works (12%).

The Water Resources study found that in the majority of cases, non-household customers had not experienced any problems either, or if they had, it was over five years ago. However, over a third of respondents had experienced low pressure (40%) and interruptions to supply (38%) in the past five years.

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In addition to delivering a high quality, reliable service with few problems, interviews conducted for the segmentation research found that generally **high** levels of satisfaction with Anglian Water's services were driven by: the company's understanding, patient approach to billing; timely provision of information; acceptable levels of contact with the company; and, in some cases, lack of competing organisations with which to compare service levels and experience.

The focus group with customers in Hartlepool found that that high levels of satisfaction were driven by: excellent customer service (speedy resolution of problems, sensitivity to people who are struggling to pay their bills, and being proactive with bill reductions); and being quick to resolve leaks and respond to other problems. It was also linked to having a local presence, and a perception that the company supports local employment.

The latest data from the CCWater Water Matters research for Anglian Water (from 2017/18) indicates that 18% of customers had **contacted the company with a query in the past 12 months** (n=400). The range for all water and sewerage companies was 14%-20% (with a weighted average of 18%). Of those customers contacting the company (n=71), just 6% did so to **complain about the service**. The range for all combined service companies was between 0%-11% (with a weighted average of 4%). Figures for Anglian Water suggest a **downward trend over the past seven years** (although some caution is required as the base is low).

In the same survey, in 2017/18, 19% of Hartlepool Water customers had contacted the company with a query in the past 12 months (n=150). The range for all water-only companies was 14%-26% (with a weighted average of 18%). Figures for the past seven years indicate an **upward seven year trend in contact**. Of those customers contacting the company in 2017/18 (n=28), 7% did so to complain about the service. The range for all water-only companies was between 3%-17%, with a weighted average of 6%. (Again, caution is required as the base is low).

When customers who had contacted Anglian Water recently were asked in the SIM tracker survey (carried out by Ofwat) **what Anglian Water could do to improve**, the largest proportion said "nothing" (10.23% in the last quarter for which data is available).

An analysis of **complaints data** from Anglian Water indicates that 6591 written complaints were received during the period 1st April 2017 – 31st March 2018. The largest proportion of these related to "policy" questions (36% or 2402). The second largest proportion related to charging (28%, 1867). Other reasons for customer complaints were: meters (7%, 477); action taken by Anglian Water (6%, 407); flooding (4%, 278); leakage (3%, 199); conduct issues (3%, 195); and quality (2%, 156).

In the Acceptability research, customers were introduced to Anglian Water's **six major challenges** (climate change, population and economic growth, environmental protection, affordability and customer expectations, planning for the future, and markets, structure and financing of the industry). Customers felt the

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most important was affordability and customer expectations (89% saying this was important). This was particularly important to "protective provincials" and "careful budgeters".

In the Acceptability research, all **customer outcomes** were seen to be important. Satisfied customers was ranked 4^{th} out of 10 (voted as important by 91% of customers, where the most important outcome was judged to be important by 97% and least important by 67%).

Customers were also introduced to Anglian Water's **seven water quality and customer satisfaction goals**. These were all considered important. 100% customer satisfaction was ranked 4th (seen as important by 90% of customers, where the highest ranking goal was voted as important by 95% of customers, and the lowest by 68%).

Students who took part in one of the future customer workshops felt that educating customers about the challenges facing the company, and its successes, might lead them to be **more understanding and satisfied.**

As part of a series of meetings, (five) retail customers were asked whether they supported the idea of Anglian Water having an **outcome delivery incentive (ODI) on retailer satisfaction**. Most of those consulted felt this was either a **good idea or one that was worth serious consideration**. However, several suggested that good customer service was something that the company should be offering to wholesalers as a matter of course anyway. One retailer objected to having an ODI on this basis. Retailers also raised questions about how any potential ODI would be monitored, and where the reward for good performance would come from.

However, in the acceptability research on Anglian Water's performance commitments and outcome delivery incentives (ODIs) the proposed bespoke performance commitment on retailer satisfaction was rated of low importance to both non-household customers (35%) and household customers (31%). Rather than focusing on retailer satisfaction, non-household customers felt that Anglian Water should be focusing on end-user satisfaction, which they felt is driven by excellent standards of service across all the other performance commitments. The research found that the Open Water situation was still news to many household and non-household customers. However, even when more information was provided, most still felt that the satisfaction of the "middle man" should not be a priority for Anglian Water.

Customers were also introduced to the proposed performance commitment on retailer satisfaction in the **consultation on Anglian Water's draft PR19 plan**, with members of the online community. This found that **measuring satisfaction felt like a standard expectation of the company** (although this issue didn't feel that relevant to household customers). Some participants liked the proposal, as it related to what they perceived as "positive competition" between companies. However, discussion of the commitment led some participants to **question why choice is not available to all kinds of customers**. Some customers were not clear what services retailers provide (if Anglian Water still provides non-household customers with their water and waste). Some participants suggested measuring

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success on the number of non-household customers that join or leave Anglian Water.

In the acceptability research on the outline business plan, customers were asked to say how important they felt various retail measures were (supporting customers in vulnerable situations, the customer measure of experience, the developer services measure of experience, non-household retailer satisfaction, and managing void properties). Among household customers, **non-household retailer satisfaction was ranked lowest** (of high importance to just 28%), while **support for vulnerable customers was ranked top** (of high importance to 79%). Among non-household customer, retailer satisfaction was seen as of high importance by a larger proportion (40%), although it still ranked second to last of the retail measures. Again, support for vulnerability was ranked top (67% for the priority register measure).

In the same research, the proposed **developer satisfaction measure (D-MeX)** also emerged as a fairly low priority. It was ranked second lowest by household customers (of high importance to 42%), and in the middle of the retail measures among non-household customers (of high importance to 46%). In contrast, the **customer measure of experience (C-MeX) was ranked second most important** of the retail measures by both types of customer (of high importance to 66% of household and 60% of non-household customers).

(Household) customers who took part in the online community consultation on the draft business plan, were also introduced to the proposed D-MeX measure. Most participants liked the notion of a two-way, collaborative, relationship with developers. Again, participants generally supported the measurement of satisfaction in order to help deliver excellent service, although **not all felt that a specific measure was necessary in this area**. The involvement of Ofwat in tracking this measure reassured participants that performance was being independently verified. Not all participants were supportive of league tables, however. Some disagreed with competition in principle, while others felt league tables don't always capture all important aspects of performance, or reflect the fact that the context in each region is very different.

In the acceptability research on the outline business plan, most customers felt the customer service targets were sufficiently stretching (between 62%-73% of all household and 77%-90% of all non-household customers, depending on the measure). Among household customers, agreement was lowest in relation to the customer measure of experience (62%), and among non-household customers for the developer measure of experience (77%). However, household customers who understood the measures were significantly more likely than non-household customers to say they didn't know if the targets were sufficiently stretching (for all of the measures). Non-household customers who understood the measures were significantly more likely than household customers to say the targets were stretching for: the customer measure of experience (CMeX), and supporting customers in vulnerable situations (priority register and the panel).

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Customer service

What we already know (as at June 2016)

Across evidence streams, customer service is generally viewed positively by household and business customers and by developers.

The Community Perception survey of Anglian Water and Hartlepool customers run in 2015 (year one, wave two) found that satisfaction levels with the ease of contacting Anglian Water and their handling of the matter were high (78% were satisfied with the ease of contacting Anglian Water and 80% were satisfied with the overall handling of the matter). The speed of resolution and politeness/friendliness of staff were the **top drivers of satisfaction**, cited by 26% and 17% respectively. However, in the same survey, just 43% of customers felt that Anglian Water 'treats its customers as individuals' and 41% agreed that Anglian Water 'values me as a customer'.

The Ofwat 2014/15 SIM report shows that **Anglian Water** achieved a **mid-ranking position** of 12th place when it comes to handling customer queries, where previously it had led the way in this regard. Satisfaction with clean and waste water query handling has fallen significantly from 2013/14 to 2014/15, particularly with regards to queries about leaks on the road, and defective and dangerous water equipment (on the clean water side) and flooding with sewage/foul water (on the waste water side.) The January Ofwat results indicate that Anglian Water is starting to improve its performance relative to the industry. However, faster response and resolution of queries as well as keeping customers updated on progress remain the top improvements suggested by customers.

SIM data for **Hartlepool Water** for the period of 2013-14 indicates that it is **ranked number one** of the 'water only' providers for customer service where, on average, 90% of customers say they are very satisfied with the customer service they receive from Hartlepool Water.

Drawing on SIM tracker data captured in 2015 YTD, when it comes to the levels of customer satisfaction with how Anglian Water handled the three most common reasons for making contact: 73% felt very satisfied when it came reporting a blockage in the sewer/drains; 75% felt very satisfied when it came making a payment and 61% felt very satisfied when it came to reporting a water leak/burst on the road.

Evidence from several qualitative research and engagement activities suggests household customers appreciate the way in which Anglian Water lets customers know about planned interruptions, and deals with emergencies. There is also support for the company's UK based call centres. Some household customers from Hartlepool who took part in qualitative research and engagement activities said they particularly valued direct, face-to-face contact with the company (through its local high street counter).

Most account-managed businesses that took part in qualitative research said they valued this relationship with the company, though some would like more intensive, tailored support. Some smaller businesses would like to have

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this relationship with the company too. There is also robust survey evidence which shows that **business customers who have an account manager are more likely to be satisfied** with the standard of customer service compared with those who had a support coordinator.

The Business Unit Report 2015/16— October (on complaints) shows that, year to date, the **billings and collections service received the most complaints** (the most common reason for these complaints relates to Anglian Water's charging policy and its debt policy). Both of these findings are consistent with the 2012/13 Business Unit Report. Among respondents to the PR14 Willingness to Pay Survey who had experienced a service problem in the past five years, a **higher proportion of businesses** (13.3%) than householders (7.4%) **had experienced problems with billing.**

The Delving into Water report commissioned by the Consumer Council for Water, which analyses companies' organisational performance data indicates that in line with other water companies, the **number of written complaints in the Anglian region has been steadily decreasing** between 2010 and 2014. In 2010-11 the number of complaints was 67.3 per 10,000 connections, compared with 44.6 in 2013-14. The figure of 44.6 is a few points higher than the average number of complaints received in the 2013-14 period (39.8) but is almost 50% less than the highest number (in this case Southern, who received 81.0). When it comes to Hartlepool, the numbers of complaints for the 2013-2014 period is the third lowest (0.18) and the numbers of complaints also saw a fairly steady decline between 2010 and 2014.

Customers who participated in qualitative research thought the **most important** aspects of customer service were: being able to get through to the right person quickly; effective tracking of queries/complaints (so customers don't have to provide the same information each time they contact the company); and first-time resolution (if possible). Customers also want to be told if they have a sudden spike in use, as this may suggest they have a leak.

The Consumer Council for Water Annual Tracker Survey, 2013, conducted key driver analysis to establish which **aspects of service are driving satisfaction with contact handling**. Referring to findings from the survey of all water and wastewater and water-only companies (rather than Anglian or Hartlepool Water specifically), the report found that keeping customers informed of progress with enquiries which are not resolved at point of contact was an important driver of satisfaction, and there is an appetite to see this improved. (Satisfaction with contact was also found to be significantly and positively correlated with satisfaction with value for money, and satisfaction with water and with sewerage services. So the authors conclude an improvement in this measure could have a positive effect on customer perceptions of value for money).

hartlepool—High quality customer service is important to household customers and across various evidence streams they suggest a number of improvements. However, available evidence (e.g. from the deliberative events and the PR14 Willingness To Pay Main Survey Focus Group research) suggests that **further**

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improvements are regarded as less important than delivering high quality drinking water, safely taking away the wastewater, and tackling leaks (while keeping bills affordable). The Acceptability research suggests customer service may be more important to Hartlepool customers than customers in other areas.

Many household customers and stakeholders who took part in qualitative research and engagement activities expressed interest in **new approaches to customer service** (including greater use of new technology to enable customers to 'self-serve'). However, there is also concern about the potential impact of any changes on particular groups (such as the elderly and those on lower-incomes) who may face ICT literacy/access challenges; customers want to know that telephone support will continue for those who need this.

Evidence from a national study commissioned by the Consumer Council for Water found that **customers know what to ask** when they have an immediate or specific need during a service driven event, and they expect responsive customer service to deliver clear and practical answers to their questions via their preferred channel. However customers have knowledge 'blind spots' and cannot take responsibility for asking for information about matters they are unaware of; there are situations where the customer would benefit from water companies providing relevant information, unasked. The same national study also found that customers are **unfamiliar with the concept of Code of Practice information** and questioned the relevance of a full suite of published service standards.

What's emerging (Autumn 2016 onwards)

The Main Stage Willingness to Pay survey found that 91% of household customers felt that **customer service is an important wider service attribute** (either quite or very important), with 57% rating it as 'very important', slightly ahead of river water quality (considered very important by 55%) and pollution incidents (54%, n=843, all subsamples, DCE and BWS surveys). Eighty-seven percent of non-household customers felt customer service was important, however the proportion rating it as very important (57%) was higher relative to pollution incidents (50%) and river water quality (46%, n=346, combined and sewerage only subsamples).

A range of evidence from this wave of research and engagement suggests **most** customers are satisfied with the current level of customer service they receive from Anglian Water and, especially, from Hartlepool Water.

Data from the CCWater Water Matters research (for 2016/17) found that 81% of Anglian Water customers were satisfied with the overall customer service they receive (n=377). The range for all water and sewerage companies over this period was 78%-89% (with a weighted average of 83%). The same research found that 89% of Hartlepool Water customers were satisfied with the overall customer service they receive (n=145). The range for all water-only companies over this period was 72%-89%, with a weighted average of 79%, placing **Hartlepool Water at the top of this range.** (Note, 2016/17 was the last time this overarching question seems to have been asked).

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As indicated above, in the Main Stage Willingness to Pay survey the majority of household respondents found Anglian Water's performance for all wider service attributes to be 'satisfactory' or 'somewhat satisfactory'. Satisfaction with customer service was higher (67%) than for pollution incidents (62%) or river water quality (59%). Just 8% were dissatisfied with customer service (n=542, combined and sewerage only subsamples). The majority of non-household respondents were also satisfied with wider service attributes, however a smaller proportion of non-household customers were satisfied with customer service (52%) as well as pollution incidents (50%) and river water quality (52%). Seventeen percent of non-household customers were dissatisfied with customer service (n=346, all subsamples).

In the BWS version of the household Willingness to Pay survey, the largest proportion of household respondents selected customer service (42%) as **the best performance area** within the set of wider service attributes that were tested. Seventeen percent of respondents selected it as the worst aspect of service. River water quality was ranked worse by 43%, pollution incidents by 32%, and bathing water quality at beaches by 8% (n=301, combined subsamples, BWS).

The focus group on biosolids, which explored general perceptions of Anglian Water at the start, also found that the company was praised for its **excellent customer service**. The six participants who took part identified that this was delivered by **skilled staff** who know how to respond to needs quickly, and involved **early communications of disruptions** and effective use of Facebook ads and door-drops to communicate with customers. Anglian Water were also praised for **simple, clear information and processes**, for example, bills that are easy to understand in comparison to other utilities, and home moves that are resolved in a single interaction over the phone.

hartlepool water focus group also praised the company for excellent customer service (including speedy resolution of problems, sensitivity to people who are struggling to pay their bills, and being proactive with bill reductions).

Results from the Community Perception Survey for this year (2017/18) indicate that 11% of household customers had **contacted the company** in the last three months, with "family first" (17%) and "tech savvies" (16%) most likely to get in contact. Among customers who have contacted the company, **levels of satisfaction have remained high**. This year, 79% of customers said they were satisfied with the **ease of contacting Anglian Water and getting through to the right person** (% very or fairly satisfied, n=162). There has been a significant decline the proportion of customers who said they were dissatisfied this year (6%) compared to 2015/16 (15%) and 2016/17 (13%). In this year's survey, 78% of household customers said they were **satisfied with the handling of their query** (% very or fairly satisfied, n=162). Results for 2015/16 were 74% and 2016/17 were 71%. Again the proportion saying they were dissatisfied this year (6%) declined from previous years (15% in 2015/16, 16% in 2016/17).

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Similar results were found in the CCWater Water Matters research. The latest data for Anglian Water (from 2017/18) indicates that 18% of customers had **contacted the company with a query in the last 12 months** (n=400). The range for all water and sewerage companies was 14%-20% (with a weighted average of 18%). As highlighted above, of those customers contacting the company (n=71), just 6% did so to **complain about the service**. The range for all combined service companies was between 0%-11% (with a weighted average of 4%). Figures for Anglian Water for the **past seven years indicate a downward trend**. In 2017/18, 90% of those contacting Anglian Water said they were **satisfied with the way their query was handled**. The range for for all combined service companies was 70%-90% (with a weighted average of 81%). Figures for Anglian Water for the **past seven years indicate an upward trend** (although caution is required as the base is low).

The CCWater Water Matters research for 2017/18 indicates that 19% of Hartlepool Water customers contacted the company with a query in the past 12 months (n=150). The range for all water-only companies was 14%-26% (with a weighted average of 18%). Figures for Hartlepool Water for the past seven years indicate an upward trend. As highlighted above, of those customers contacting the company in 2017/18 (n=28), 7% did so to complain about the service. The range for all water-only companies was between 3%-17%, with a weighted average of 6%. In 2017/18, 86% of those contacting Hartlepool Water said they were satisfied with the way their query was handled. The range for for all water-only companies was 68%-91%, with a weighted average of 84%. Figures for Hartlepool Water for the past seven years indicate a downward trend. (However, some caution is required as the base is low).

In the CCWater Water Matters research for 2017/18, 73% of Anglian Water customers felt that the company **cares about the service given to customers** (n=372). The range for all water and sewerage companies was 61%-79% (with a weighted average of 69%). Results for Anglian Water over the **past seven years indicate an upward trend.**

Results for Hartlepool Water from the same survey are again positive, and slightly more so than for Anglian Water. In the latest set of data from 2017/18, 78% agreed that the company cares about the service given to customers (n=145). The range for all water-only companies was 65%-83% (with a weighted average of 71%).

Despite these generally very positive results, in the Community Perception research, just 39% of customers surveyed this year (2017/18) agreed that "Anglian Water is a company that values me as a customer (n=1294), reflecting similar results for 2015/16 (41%) and 2016/17 (40%). This year's results also suggest a decline in the perception that "Anglian Water treats its customers as individuals". Just 38% of customers agreed with this statement (n=1280), a statistically significant decline on 2015/16 figures (of 43%).

The segmentation research found that across the whole customer base, 46.6% felt strongly that Anglian Water should **proactively contact them to discuss important issues**, such as if a bill is higher than expected (answering 9 or 10,

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where 10 is strongly agree). However, proactive contact was much more important to certain parts of the customer base than others. For example, 63.2% of the "ecoeconomisers" (the 14% of the customer base who are more likely to be over 55, and less likely to have children under 16 living at home) felt strongly that the company should proactively contact them, whereas only 36.9% of "tech savvies" (the 28% of the customer base who are more likely to be younger, male, with children under 16 at home, and less likely to be white British) felt the same.

More proactive communication was also identified as one of the things that Hartlepool Water could do to increase customer satisfaction still further. Customers who took part in the focus group wanted the company to do more, in particular, to communicate **opportunities to save water and money** (e.g. explain the benefits of moving on to a meter), and the **additional support** available to customers facing particular difficulties.

The segmentation research suggests that across the whole customer base, the phone remains the preferred route of communication in most instances. For general enquiries to the water company, customers favour the phone (76%), followed by email (33%) and website/online live chat (16%). For urgent enquiries to contact the water company, the phone is even more important (93%), followed by email (8%) and online live chat (6%). In terms of contact from the company, for general information the preferred route was post (47%), followed by email (46%) and phone (26%). For urgent information from the company the preference was phone (62%), followed by email (31%) and then post (24%).

However, the segmentation research found some clear differences in preference for communications channels across the customer base. "Tech savvies" are more likely to want to contact their water company and hear from them through digital channels. They are less likely to want to use the phone to contact Anglian Water (62% for general enquiries, 87% for urgent issues) or to want to be contacted by the company by post (34% for general enquiries and 19% for urgent issues). However, the "comfortable and caring" group (26% of the customer base who are more likely to be social class AB and 55+) are more likely than average to want to contact their water company by phone (86% for general enquiries, 96% for urgent issues), and for the water company to use this method to contact them about urgent issues (68%) and to use the post for general information (55%). They are less likely to want to use or appreciate contact by digital methods. The segmentation research also found some differences between sections of the customer base in relation to payment preferences. For example, while just 4% of "tech savvies" like to make single payments on the phone, 14% of those in the "comfortable and caring" group like to do so.

These results are supported by findings from one of the future customer workshops. Although participants felt the company should make better use of IT in its contact with customers, they felt it was **important to be able to phone and speak to a person in an emergency**, as this offered greater reassurance that the issue would be addressed.

Qualitative interviews carried out for the segmentation research found that customers were attracted to self-service ideas as these: were similar to models

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in the gas and electric industry; provided opportunities to monitor use and save money; avoided the inconvenience of meter reader visits; and potentially limited contact with the company. However, strong reservations were expressed by a notable minority of customers who were concerned about the difficulty of reading some meters and added responsibilities for home-owners.

When told about Anglian Water's ambition to "better serve our customers by driving digital transformation across our business" customers who took part in the online community trial could see the benefits in helping them to monitor usage and therefore costs. However, they observed that digital transformation is an established area of focus for other companies (including other utilities) and felt that Anglian Water simply needs to keep up with this (rather than view it as a major ambition in its own right). Customers ranked this ambition in fourth place, behind the other three strategic challenges the company faces. While customers appreciated the intention to "better serve" them, they also suggested the phrase "digital transformation" lacked the human touch and felt like jargon. Some customers wanted to know more about the practical changes that might be involved.

emphasise the importance of ensuring that groups that are not as familiar with new technology are not disadvantaged by the shift to digital operations. This was also a concern raised in one of the four future customer workshops. Participants thought it would be important to retain call centres, at least for the time being, as they felt older people preferred phone contact to use of new technology. Similarly, while participants in the Hartlepool Water focus group suggested the development of a water App to help customers manage their own water use, they also advocated the development of a network of local "ambassadors" who could go out into the community and raise awareness of services and support to save water and money, particularly among more vulnerable customers.

These results appear to be confirmed in the Acceptability testing on the Strategic Direction Statement. Of the 8% of customers who thought one of the four long-term goals should be excluded, **support was highest for excluding digital transformation (49%).** However, customers were also keen to see more detail on a number of areas, including use of technology and smart meters.

The customer world focus groups found that **disruption is where the company** "becomes a hero or a villain", depending on how incidents are dealt with. Severe disruption leads people to blame the company (questioning the infrastructure and the capability of the company to maintain it). The groups also found evidence of "confirmation bias" (customers who have had a bad experience were more likely to have heard of others in a similar situation). The groups found that if problems are tackled quickly, and customers are compensated, the story becomes a positive one.

During this wave of research and engagement, Anglian Water commissioned **two dedicated pieces of research** to explore customer experiences of, and views about, service disruption in more detail. These found slightly different levels of

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satisfaction with the way that the company handled the events, but highlighted similar messages about how it can improve customer service in future.

Overall, customers who took part in the Horncastle co-creation event (who had experienced a recent outage) were **very satisfied with Anglian Water's response to the incident.** They were particularly impressed with: text updates and proactive phone calls from the company; the amount of bottled water available to them; and the respectful way in which they were treated by Anglian Water staff. **Those customers who were less positive felt that**: Anglian Water had not acknowledged the consequences of the outage for livestock and livelihoods (as they had focused on the threat to human health and lives); communication had not always reached more isolated communities and smaller villages; and the website had insufficient up to date information (in contrast to a good response on the phone and via social media). In terms of **thinking about possible future disruptions**, farmers in particular were keen to develop some community-based emergency solutions. Some customers also said they would be willing to share more of their personal details with Anglian Water if they knew it would help the company to provide a more bespoke response.

A second piece of research on this topic targeted customers in Daventry, who had experienced an outage in the run up to Christmas (23rd-24th December 2017). This focus group with seven customers found that, for the most part, the incident was **viewed simply as an "inconvenience"**. Customers were generally resilient to the interruption, demonstrating a "get on with it mentality". Most felt the timing of the incident didn't matter too much, as the supply came back on in time for Christmas day. Participants also generally understood that the issue wasn't Anglian Water's fault, had empathy for the engineers who had to work over Christmas, and were appreciative of their work. However, customers agreed that **48 hours was the maximum amount of time** they were willing to go without water; anything beyond this was viewed as "serious". Participants also acknowledged that the acceptable time limit might be shorter for some customers, such as those with young children.

In the Daventry focus group, participants' main criticism of Anglian Water concerned poor communication. Discussions highlighted that the worst thing for customers was not knowing how long they would be without water, as this made it more difficult to deploy coping strategies and plan around the incident. None of the participants had received a call to say the water was off, and only two of the seven had received a call to say it was back on. In addition, only a few customers had received the £20 credit, or knew about this (although they appreciated the gesture), and very few were aware of the priority register for vulnerable customers.

Moreover, participants were **not clear how they should be accessing updates from Anglian Water during an incident**. The majority wanted to call the company directly, but were frustrated with the number of steps involved in getting through to the incident helpline. One person was frustrated to have signed up to the text alert service to find that texts redirected them to another website where they were required to log in, which they felt wasted their time.

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Reflecting findings from other research, the discussion group found that customers had different preferences for communication in an incident. Older customers wanted to speak to someone on the phone, while younger customers were happy with an automated phone service to save time. While some customers felt that local Facebook groups and local news were effective ways for the company to communicate what customers should do in an emergency, around half felt the bill was a key channel for this information.

In future, participants in the Daventry focus group wanted **more effective communication across the whole duration of an outage**, including: on/off alerts; timely information on expected duration (to prevent people from panic-buying water); a clear contingency plan (including the steps the company is taking to resolve the situation and where customers can get support); a clear point of contact at Anglian Water and staff on the ground to provide information (in particular to the vulnerable); and frequent updates to reassure customers that the job is being taken care of.

Seemingly confirming these findings, analysis of social and digital media for the period 1st February 2017 – 31st January 2018 found that the **greatest consumer need in terms of content from the company was for up-to-date information on local supply issues and roadworks**, as well as speedy updates on individual cases. The issue of repairs generated 644 conversations on social media during the study period. The topic was particularly contentious, driven by customers tweeting frustrations about faults. Slow restoration time led to the most complaints, with around 7% specifically requesting updates.

In the online community activities specifically focused on sewerage rehabilitation, the majority of (the 20) customers who took part had experienced some form of **pipe-related disruption**. **Service cuts** felt like the most severe type of disruption, and customers expected these to only last a few hours. However, although inconvenient, participants felt they are generally well managed. **Noise** was regarded as an inevitable consequence of work being conducted, and was not regarded as a major issue, as it usually occurs in working hours. However, **road closures and traffic disruption** were regarded as the worst side-effects of work taking place (particularly for those who rely on public transport, and for people with disabilities).

The research found that how works and disruption are managed affects levels of customer frustration. Customers **felt least frustrated** when: they were informed well ahead of work starting, allowing them to plan accordingly; they were kept updated of any changes to timings; and when traffic continued to flow, even if major junctions were closed. Customers **felt most frustrated** when: they felt that a road closure had not been planned in advance; and when closures go on for weeks, without a clear end date, and with **little visibility of work actually taking place**.

The question of **how best to schedule works** so as to minimise disruption felt like a complicated one to customers. Generally, they had a preference for work to be carried out in intensive periods. In comparison to shorter bursts of activity over a longer period, customers felt such an approach would be easier to communicate

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and more efficient and cost-effective. However, customers recognised that the appropriateness of the approach will depend on the circumstances. For example, it may be less disruptive to spread works over a longer period of time in some high access areas (such as outside a school). Customers also made a number of suggestions for **improving communications** about pipe-related disruption, including: more tailored information (with just the essential facts provided to all and more information available if people are interested); better use of on street signage (including digital signs that can be updated); and more information on why workers may not be on site.

Despite these concerns about pipe-related disruption, the valuation research on flooding and roadworks found that the wellbeing impact per incident for roadworks is more than ten times less than it is for flooding. The research team suggest that while roadworks represent a disturbance to people's quality of life that is more frequent in nature, each incident has less impact. In contrast, flooding is less frequent but has more impact when it occurs. The research also found that flooding and roadworks values per incident were higher in urban than rural areas. This is largely because there tend to be a significantly higher number of households living nearby to an incident in urban areas, due to greater population density.

In the Main Stage Willingness to Pay survey, reflecting generally positive views of Anglian Water's performance, most household respondents opted to **maintain current performance levels** for wider service attributes. However, compared to water and sewerage services, slightly more respondents wanted to see improved performance in these areas. **Sixty seven percent of household customers wanted to maintain current performance levels for customer service, with 24% keen to see further improvements**, a smaller figure than the 37% who wanted improvements in river water quality and pollution incidents (n=542, combined and water only subsamples, DCE survey).

In the same survey, a greater proportion of non-household customers were keen to see improvements to wider services. Just fifty two percent non-household customers wanted to maintain current performance in relation to customer service, with 34% wanting to see improvements. (As for household customers, the proportion wanting to see improvements in pollution incidents and river water quality was higher still at 47% and 48%, n=346, all subsamples).

Results from the Willingness to Pay choice task indicate that in making choices relating to wider service attributes, household and non-household customers place the greatest weight on river water quality (29% households, 36% non-household customers) and pollution incidents (28% households, 33% non-household customers). For household customers, customer service accounts for 20%, below change in the bill at 23%. For non-household customers, customer service accounts for 19%, above change in the bill at 12% (households n=542, non-households n=346).

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Additional (practical) support for vulnerable customers

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What we already know (as at June 2016)

Some **lower-income** and **disabled customers** taking part in qualitative research appeared to be less satisfied with the company's customer service. For example, there were some concerns about the cost of telephone calls to customer services and the accessibility of the website. This is mirrored in findings in a national study on the impact of welfare reform, which found that across several areas and water providers **those with higher debts have a worse experience of customer service**.

Most participants involved in qualitative research and engagement activities said they had **limited awareness of the additional (practical) support available for vulnerable customers**. However, there was support for this (both from those who receive it and those who don't). In the Consumer Council for Water Annual Tracker Survey for 2014, 51% of household customer respondents receiving services from Anglian Water were aware of services for the elderly/disabled (this was an increase from 34% in 2013 and 32% in 2012). Forty seven percent of household customer respondents of Hartlepool Water were aware of "special assistance" services for the elderly, disabled and other customers (an increase from 36% in 2013 and 24% in 2012).

What's emerging (Autumn 2016 onwards)

This wave of research and engagement has put even greater emphasis on understanding the experiences and perspectives of customers who face additional challenges.

The strategy development process found that some vulnerable customers do not identify as such. Three of the four dedicated pieces of research on this topic suggest a need to **re-frame the conceptualisation of vulnerability and the language used to describe customers**. As the Accent study points out, referring to customers as "vulnerable" focuses on how the world views that person, and feels fixed, permanent and negative. In contrast, referring to "customers in vulnerable situations" emphasises the contingent nature of vulnerability and feels more positive.

The first Community Research study on vulnerability suggests it is helpful to think about both communities that may be more likely to experience vulnerability (for example, those living in areas of high deprivation, housing association and sheltered housing tenants, people assigned a social worker, members of disability support groups, users of gas or electric payment keys, benefits recipients, and food bank users), and those facing challenging life events or transitions that may mean they are temporarily vulnerable (for example, those experiencing a period of hospitalisation, who have recently lost their job, had a baby, suffered a bereavement, split up from their partner, or taken on new responsibilities as a home-owner). The authors point out that temporary vulnerabilities can have a cumulative effect, propelling people into longer-term or more permanent states of vulnerability. The dedicated discussion on vulnerability on the online community also emphasised that vulnerability isn't usually caused by a single factor, but rather results from a combination of circumstances and life events. Participants stressed

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that vulnerability can be permanent or transient, and can affect anybody (although they felt those with medical conditions or disabilities, poorer pensioners and low-income families, especially single parents, may be most in need of additional support). They also cautioned that just because someone is classed as being vulnerable, this doesn't automatically mean that they face difficulties in paying their bill. They felt it was **important to avoid over-generalising** about people's situations and needs.

The Accent and first of the Community Research studies suggest that the severity of the challenges customers are facing, the nature and extent of their support networks, their financial literacy and confidence, and their emotional response to vulnerable situations all **shape their experience of vulnerability**. While some people will proactively seek out help, others (sometimes those most in need) will leave bills unopened and debts piling up. Some of the customers who took part in the Community Research study did not have support from a partner or other family member and were accessing help from a support organisation, such as their local Citizens' Advice Bureau. However, the authors note that increasing financial hardship has come at the same time as a decrease in the availability of free financial advice and this has hindered people from resolving their difficulties. Echoing findings from the online community, the authors found that **single mothers** were often the group with the greatest sense of powerlessness over their household finances.

The Accent report identified **five main groupings of customers** based on the severity of the situation they were facing and the support they needed or wanted from Anglian Water: "desperate and drowning" (with chaotic lives, poor support networks, and not likely to contact Anglian Water for help); "living to the max" (with vulnerabilities largely under control, good networks, who are financially solid and proactive in asking for help); "surviving" (who tend to have more transient vulnerabilities, a history of financial difficulties that are now under control and good support networks); "super struggling" (who tend to be empty nesters that are financially struggling and facing multiple challenges); and "managing well enough" (who tend to be older, with limited financial concerns, and facing single rather than multiple challenges).

Fear or actual experience of being patronised or stigmatised was identified a key barrier to people seeking help in three of the four dedicated studies on this topic. The Accent research also found that customers disliked: intrusive questions and being asked for too much information; repeating financial information over and again to different members of staff; and filling in overly complicated application forms.

A few people who took part in the intial Community Research study were paying off water bill debts to firms such as Orbit and Fidelite and felt patronised and badly treated for having to pay back their bill plus an additional amount. However overall, both this study and the Accent study found that water bills were not top of people's minds; customers were far more concerned about their rent and other utility bills (such as gas and electricity), which were higher and tended to fluctuate much more. While the initial Community Research study found that many

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customers were not clear if Anglian Water supplied their water or sewerage services or both, most reported a **positive experience of dealing with their water company**, and felt listened to and treated fairly. Many of the participants who took part in the online community activities focused on vulnerability also felt that **Anglian Water excels in the provision of support**.

Despite these generally positive findings, it is worth noting that when customers in the Community Perception survey were asked what more Anglian Water could do to improve opinions about how it cares for communities, the percentage of vulnerable customers saying **reduce prices** (10%, where n=313) was significantly higher than results for the core sample (6%, where n=1080).

Confirming findings from previous customer engagement and research, the two Community Research studies on vulnerability found **limited awareness of Anglian Water's special tariffs and its Welfare Fund or priority service.** The second Community Research study, (which tested the PR19 draft business plan with customers in vulnerable circumstances), found that there was greater awareness of priority services from energy companies and councils. However, both special tariffs and additional support services received a positive reception from participants in these studies when they were told about them. Customers who took part in the online activities on affordability and vulnerability support were also largely unaware of the support offered by Anglian Water, especially of the fact that each type of support is designed around a specific set of support needs.

The latest figures from the CCWater Water Matters research (from 2017/18) perhaps suggest a slightly more positive picture on awareness, with 46% of Anglian Water customers saying they were **aware of additional/priority services** (n=400, figures include "don't know" responses). The range for all water and sewerage companies was 37%-52% (with a weighted average of 43%). Results for Anglian Water represent an **upward seven year trend**.

Results from the same research for Hartlepool Water indicated that 50% were aware of additional/priority services in 2017/18 (n=150). The range for all water-only companies was 41%-51% (with an average weighted figure of 44%). This also represents an **upward seven year trend.**

In all of the research that has explored issues of vulnerability (both dedicated studies and other activities where these issues have been raised), the **importance** of raising awareness of additional support has been a clear theme. In the first Community Research study on vulnerability, this was the strongest message that came out of discussions about what the company could do better in future. This issue was also highlighted in the online activities focused on vulnerability, the focus group with customers who had experienced an outage in Daventry, and the focus group with customers in Hartlepool. Of the five potential areas of work in the draft PR19 business plan on this topic that were tested with participants in the second Community Research study, there was greatest support for efforts to raise awareness of priority services and special tariffs.

In the second Community Research study, participants were supportive of company proposals to use channels other than the bill and mailouts to

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promote awareness, especially as some people admitted that they didn't look at their bill very closely, if at all. However, participants emphasised that the **choice** of channels needed careful thought to ensure these are appropriate for the different groups the company hopes to target. Participants with visual impairments pointed out that some of Anglian Water's proposed channels, such as advertising on the side of buses and on pharmacy bags, would not be appropriate for them. They suggested the company should also consider using local radio, "phone-in" sessions with Anglian Water staff, and newsletters from local support organisations (which could be accessed in large print or audio form).

The four dedicated studies on vulnerability suggest a number of **specific improvements** that might help support customers in vulnerable situations, including: allowing customers to make smaller payments and spread payments; providing payment keys (as is the case for gas and electricity); allowing vulnerable customers to nominate an alternative point of contact for queries about their account; making it clear in correspondence that contact numbers are included in most mobile phone call plans or that people can text and request a free call-back; having slower-choice menus on the phone; developing a dedicated customer service line for customers in vulnerable situations; and using bigger print and/or coloured paper to aid reading of printed materials.

The value of additional training for customer service staff was also a key message emerging from these studies. The second Community Research study suggests this is particularly important to customers with sensory impairments. Participants in this study said they felt that utility companies frequently misunderstand or overlook their needs, and so they were strong advocates of additional training. Deaf participants highlighted that they can't use the phone, but are frequently contacted this way. They were also keen to emphasise that English is not a first language for most British Sign Language (BSL) users, and so many Deaf participants found it hard to write in English and to understand written English. These participants were keen for Anglian Water to provide (or promote existing) video-BSL services, as well as use of FaceTime and New Generation Text, and to contact them through nominated third parties. Visually-impaired customers suggested having water meters with larger fonts, and making sure that the bill design didn't change too frequently (as they got used to where they needed to focus their attention on the document). In general, participants were keen for Anglian Water to do more to identify customers with sensory impairments and explore communications preferences with them.

The online community activities focused on vulnerability emphasised that **proactive case management** was required to pick up on and tackle vulnerability, including through home visits (e.g. to identify leaks, and provide advice and tips on water saving, getting through winter, and property adaptations etc).

Participants in the Hartlepool focus group suggested that a **network of community "ambassadors"** should be recruited to help raise awareness of services and support to help customers save water and money, particularly those who are more vulnerable (something that Anglian Water has now implemented). Participants felt that ambassadors could share this information with local

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community groups, who could then cascade it further. They also felt that the **Hartlepool Water shop** could be used as a community space, to help get the messages out.

More widely, in all four dedicated studies on vulnerability, there was strong support for Anglian Water working in partnership with other agencies to identify vulnerable customers and tackle vulnerability.

In the Accent and initial Community Research studies, customers were keen to see Anglian Water working with housing associations and councils to make water payments part of rent or take them directly from benefits. In the Community Research study, participants also expressed support for a benefits check being available from their water company (although some questioned why companies would want to do this and felt the timing of the offer would need to be sensitively handled). In the online community activities focused on vulnerability, participants were keen to see Anglian Water working with other utility companies to identify vulnerable customers. Having a single register was seen as a helpful in reducing the burden on customers to provide information to multiple organisations. Participants were also keen to see Anglian Water partnering with charities, as this was felt to be a good way to raise awareness of social tariffs among communities, and for Anglian Water to learn more about the multi-dimensional nature of vulnerability. However, participants questioned how Anglian Water would choose which charities to work with; they felt it made sense to focus on those that were supporting customers who had particular needs for water (e.g. at-home dialysis patients). Participants who took part in the Hartlepool Water focus group also suggested the company should "piggy-back" on existing services to raise awareness of the additional support that is available to more vulnerable customers.

In the second Community Research study on vulnerability, participants **reacted positively to Anglian Water's draft business plan proposals to work with other agencies** to identify people who face additional challenges and to support them (including working with energy companies). However, some customers expressed concerns about the **sharing of personal information between organisations**, an issue that was also raised on other research.

Overall, research suggests there is **support for special tariffs and additional services for those facing particular challenges**. For example, the acceptability testing of the outline business plan found that when customers were asked about their views on a range of retail measures, 79% of household customers and 67% of non-household customers said support for customers in vulnerable situations was of high importance to them, making this of greatest importance among the retail measures (Note, 67% of non-household customers relates to the priority register). As highlighted above, in the acceptability research on Anglian Water's performance commitments and outcome delivery incentives (ODIs), of all the company's bespoke performance commitments, household customers placed high importance on the commitment on vulnerable customers (67% said it was of high importance to them, ranked second after external sewer flooding on 73%). Non-household customers' ratings followed a similar pattern,

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with vulnerable customers again ranked second (on 70%), after external sewer flooding (ranked of high importance by 85%).

However, research also indicates that **support for these customers is not without caveats and limitations**. In the online activities on vulnerability, for example, while a large group said they were willing to pay to support others, they **drew the line at providing financial support that resulted in a big impact on bills.** In the Twitter and Facebook polls on vulnerability, 70% (of the 344 customers taking part across both polls) said they would be willing to pay £2 extra a year to fund more specialist support for vulnerable customers. Most of the customers taking part in the online activities on affordability and vulnerability support also said they would be in favour of a small increase in vulnerability support. However, the total £23 non-eligible customer fund felt higher than many customers had anticipated and, while learning about it did not affect acceptance for some, for a large majority this made them more resistant to supporting others. The research found that some customers were particularly critical, and that they were skewed towards the "protective provincial" group. (Note, neither the poll nor online activities provide representative data).

In the online activities on vulnerability, there was a strong view amongst some customers that **billing support was a responsibility of Government**, rather than the water company (an issue that was also raised in the second Community Research project). In the online activities on affordability and vulnerability support, some of the older customers complained about this as a form of "indirect taxation". Some customers in this research also felt that Anglian Water should fund support out of profit, not from customers' bills.

There appear to be slightly different views about eligibility for additional support in recent research, but the elderly, those with disabilities and poor health, and low income families are often mentioned. The online activities on affordability and vulnerability support found that there was greatest support for initiatives that helped more people (e.g. flexibility in payments and the three concessionary tariffs), as there was a perception that these will have more impact overall and will help to prevent bad debt. Some participants in the online activities on vulnerability felt that flexibility in payments was something that should be on offer to all customers, not just those in vulnerable situations. However, it is important to note that some participants felt that social tariffs did not incentivise behavioural change (and might actually act as a disincentive to save water).

Participants in the second Community Research study were keen to emphasise that additional support should only be made available to people who really need it. They were **keen to avoid people** "playing the system". This was also highlighted as an important issue in the online community activities on affordability and vulnerability support.

The same research found that the **recovering of bad debt created the strongest negative response** among participants. Customers emphasised that they were going to considerable lengths to pay their own bills, and so were critical of having to support others who are perceived not to have made the same effort. There was an assumption that those who fall into bad debt may be simply refusing to pay or

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may not be in genuine need of support. This is where a majority draw the line and think government should step in via the benefits system. It did not feel like customers' responsibility to fund others in this situation, especially if they are already on benefits (where the assumption is that this should cover people's expenditure).

The idea of Anglian Water working alongside an **independent board that is** charged with promoting the needs and interests of customers in vulnerable situations has been tested in a number of pieces of research. This has received mixed levels of support from customers.

The most positive reaction came from participants in the online activities on vulnerability. Seventy percent of (the 50) participants who took part **supported the idea of an independent board**. This was thought to position Anglian Water in a positive light as a company that is taking vulnerability seriously. Use of an independent board was thought to minimise the risk of other company agendas interfering with commitments to these customers, and to bring fresh perspectives to bear that will enhance standards. However, some participants emphasised that it was important for the company to speak directly to the customers they were trying to support, rather than to expensive consultants. They also wanted to know more about the experts who might be involved, were **keen to have reassurance that this would not just be a "tick box" exercise,** and stressed that performance metrics should support a focus on what is most important. (Note, this was not robust quantitative research).

The idea of having an independent board was also explored in four of the (seven) focus groups conducted as part of the second Community Research study. This found a **more mixed reaction** to the idea. Some customers welcomed a degree of external challenge to the company, including by charities. However, echoing findings from the online community, others were more sceptical. They questioned who would sit on the panel, and whether they would be truly independent.

In the acceptability testing of the outline business plan, of the different ways in which Anglian Water can support customers in vulnerable situations, there was **least support for the idea of an independent panel** of vulnerability experts to challenge the company (28% of household and 31% of non-household customers felt this was of high importance).

In several pieces of research, customers were introduced to Anglian Water's **proposed performance measures on vulnerability support**. In general, these measures were supported, although not without caveats.

In the second Community Research study, participants in four of (the seven) focus groups were asked for their views about **how Anglian Water should measure performance** in this area. In principle, there was **muted support for a measure on the number of people on the priority register**. Some participants felt it was positive that Anglian Water is aiming to increase the number of people on its priority register from 13,500 to 100,000+, however with such a large increase in numbers, some questioned **how the company will ensure that only those who are really in need will benefit from support**. Reflecting findings from other

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research, some participants questioned whether they would be paying more in their bills to support so many additional people, and **whether it was really Anglian Water's job** (rather than, for example, social services) to help those who are struggling.

In the consultation on Anglian Water's draft PR19 plan, participants from the online community were introduced to Anglian Water's (revised) proposed performance commitment to increase the number of vulnerable customers on its priority register to 370,000 by 2025. This would represent approximately 15% of the total customer base. (Current projected performance by 2020 is 35,000). The consultation exercise found that commitments to help customers facing particular challenges resonated with participants, and this aspect of the plan was largely supported. However, the consultation also found that some participants questioned the setting of a target based on what they regarded as an arbitrary number of customers on the priority list, rather than just aiming to identify those customers who may need support. Plans to increase the number of people on the register tenfold in five years also led some participants to question why these people had not been identified as vulnerable before. Some participants questioned why the company should be incentivised for performance in an area they felt should be just part of providing a good service anyway. Reflecting other research, some customers drew the line at providing financial support for vulnerable customers (in the form of concessionary tariffs), feeling that this was a role for government, rather than the water company.

In the acceptability testing of the outline business plan, **most customers felt the targets on vulnerability were sufficiently stretching**. Of all household customers, 70% felt the priority register target was sufficiently stretching and 69% felt this about the panel assessment target. Ninety percent of all non-household customers felt both targets were sufficiently stretching. As highlighted elsewhere, household customers who understood the targets were significantly more likely than non-household customers to say that they didn't know if the targets were sufficiently stretching.

In the online community study on vulnerability, most participants felt that Anglian Water would **easily achieve the Crystal Mark and BSI standard**, as they were already excelling in the provision of support and their communications were clear and accessible. Some questioned whether spending more money on training staff who were already good would be worthwhile, and why Anglian Water needs to get an award for doing what they considered was the right thing to do anyway.

In the Water Resources Second Stage research, as part of the restrictions survey, customers were asked about their perceptions of various types of restrictions, including their likely impact. In relation **to having no tap water**, the greatest concern of household respondents was not having water for everyday activities such as cooking, washing and cleaning (72%), followed by concerns about the health and hygiene impacts on themselves and their family. However, 36% of respondents indicated that they would **struggle to stand to queue for water at a standpipe**, highlighting an important practical difficulty with implementing this restriction and ensuring water reaches vulnerable customers.

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Sewerage collection, Water recycling

Sewer flooding

What we already know (as at June 2016)

Participants in qualitative research and engagement activities expressed the view that sewer flooding was a **particularly serious and unpleasant service failure**, albeit one that occurs rarely. The Second Stage Flooding (Stated Preference) research reveals a range of views about sewer (and mains water) flooding trends, but household and business customers who took a view were much more likely to say the problem was **not increasing**.

The Second Stage Flooding Study indicates that sewer flooding is viewed as much worse than water flooding — even when the extent of the damage caused by each is the same. This is primarily because of the health risk customers associate with sewer flooding. The study suggests that sewer flooding in the home (including care homes) is viewed as most serious by both household and business customers. This was followed by sewer flooding of public organisations. The lowest priority was agriculture.

The PR14 Willingness to Pay Survey also found **external flooding to be much less of an issue than internal flooding** (the value of internal flooding was nearly ten times that of external flooding). It also found that, for internal flooding, preventing deterioration from the current level of service was more highly valued (30% higher) than making improvements. This difference was not seen in external flooding where the value of preventing deterioration and making improvements was the same. The vast majority of customer experiences of sewer (and mains) flooding related to external incidents.

In the Second Stage Flooding Survey Report frequency of flooding (of all types) was a key driver of willingness to pay for both household and business customers. **High frequency flooding of homes was seen as the worst scenario**, with very high willingness to pay estimates for this.

Over half of those household customers who responded to the Second Stage Flooding Survey saying they had experienced some kind of flooding **did not contact Anglian Water directly**. (This may seem quite a high percentage, but it includes those who had experienced flooding of highways and other external areas; experience of internal flooding was very low). Over half of businesses experiencing sewer flooding did not contact the company directly.

Around 70% of household and business customers who contacted Anglian Water following sewer flooding felt either **satisfied or very satisfied** with the company's response (however caution is required in interpreting results as the total number of responses is very small).

As part of the OPM Domestic Customer Survey, respondents were asked to complete the investment simulator. Sewer flooding inside people's homes emerged as a fairly low priority for future investment in this exercise. Only 26% of customers opted to increase investment from the pre-set level. A higher proportion

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of respondents (40%) opted for an increase in investment in external sewer flooding. In respect of both internal and external sewer flooding, customers from socioeconomic group D opted for a higher level of investment than those in groups B, C1 and C2. When asked which (of a list of 11) aspects would improve satisfaction with the value for money of the service, the least cited (named) factors were 'sewer flooding outside the home' and 'sewer flooding inside the home'. Sewer flooding inside homes was more likely to be selected by customers in socio economic groups D and E compared with those in B.

The PR14 Willingness to Pay Survey provides the most robust data on customer views of sewer flooding. The majority of household (79%) and business (78%) respondents said they were **happy with the current level of service in relation to sewer flooding**. (However, a notable number of respondents said they did not know if the current level of service was satisfactory or not. For all other service measures, except pollution, respondents were generally a lot clearer on whether they were happy with the current level of service or not). Despite the majority of respondents saying they are happy with the current level of service, **willingness to pay values per property are high,** indicating that this is an **area where customers would like to see improvement.**

Evidence from several qualitative studies suggests there is **limited understanding of Sustainable Urban Drainage (SUDs)** type initiatives. Evidence from the Second Stage Flooding Survey confirmed a limited understanding of these initiatives, but revealed that they are more popular options than traditional hard engineering solutions. However customers viewed these solutions as having limited application in practice and therefore as not effective in achieving widespread reductions in flood risk.

The FOG research suggests that concern about **blockages in wastewater pipes or drains** has declined slightly from a high point immediately after the Keep it Clear campaign. However, almost all household customers continue to think it is important to reduce blockages. Respondents cited a range of reasons for concern about blockages; while 34% said the cost of repairs was their main concern, 11% cited sewer flooding. The proportion of customers that feel they know a lot or quite a lot about what should and should not be disposed down sinks, toilets or drains has dropped slightly from the benchmark, as has the proportion of respondents saying Anglian Water is doing all it can to reduce blockages.

However, campaign materials continue to elicit positive responses from respondents when they are presented to them.

The Customer Education Strategy (The Water Bureau, 2015) finds that there is an industry-wide acknowledgement that the **majority of the public uses sewers to dispose of inappropriate items of household waste**; and that there is the need for wastewater education on the responsible use of sewers and misconnections, particularly for certain groups.

The Weather Sponsorship Branding Tracking survey which was run over four waves found that 91% or more of customers consistently felt that it was important

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or very important that they as customers dispose of items correctly in both their kitchens and bathrooms.

What's emerging (Autumn 2016 onwards)

The Main Stage Willingness to Pay research suggests that customers think all of the attributes tested in the survey (relating to water, sewerage and wider services) are important. In relation to sewerage services, **household customers prioritised sewer flooding**, with 61% saying both internal and external flooding were very important (n=859, combined and sewerage only subsamples, DCE and BWS surveys). Sewer flooding was **also prioritised by non-household customers** (57% internal and 56% external, n=349, combined and sewerage only subsamples).

As highlighted above, the Willingness to Pay survey indicates that the majority of household customers have not experienced any problems with their water or sewerage services in the last five years (72%). Problems with sewerage services were less common (8%) than problems with the water service (15%, n=1353, all subsamples, DCE and DWS surveys). A smaller proportion of non-household customers had experienced no problems with their service in the past five years (55%). For non-household customers, problems with the sewerage service (14%) were as common as those with the water service (15%, n=500, all subsamples, DCE survey).

Overall, 113 household respondents cited sewerage service issues. Of those, sewer flooding inside the home was the most commonly experienced problem (66%, or 75 respondents), followed by a blocked drain on or near their property (49%, 55 respondents), and odour from sewage treatment works (39%, 44 respondents). Of the 113 respondents, 20% had experienced external sewage flooding in public places near a property and 15% had experienced it in a garden or drive. Among the 74 non-household customers who had experienced problems with their sewerage services, a blocked drain was the most commonly experienced problem (55%, 41 respondents), followed by sewer flooding in public places (26%, 19 respondents), and inability to flush a toilet (22%, 16 respondents). Twenty percent of the 74 non-household customers had experienced a problem with sewer flooding inside premises and 18% outside.

In the same survey, most customers said they felt Anglian Water's current performance in relation to sewer flooding was satisfactory or somewhat satisfactory. Sixty-nine percent of household customers felt performance on internal sewer flooding was satisfactory and 67% felt external sewer flooding performance was satisfactory (n=558, combined and sewerage only subsamples, DCE survey). The figures for non-household customers were lower (59% and 50% respectively, n=349, combined and sewerage only subsamples).

In the BWS version of the Willingness to Pay survey, household customers were asked about the **aspect of their current service or performance that was best and worst.** For sewerage services, **performance for internal sewer flooding**

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was rated best by a large majority of respondents (57%), followed by odour from sewerage treatment (24%). However, external sewer flooding was rated worst by the majority of respondents (52% rated this as worst and only 19% as best, n=301, combined subsamples).

Overall, the CCWater Water Matters research also suggests quite high rates of satisfaction with this aspect of Anglian Water's performance. The lastest figures (from 2017/18) for Anglian Water indicate that **82% of customers were satisfied with the company's actions to minimise sewer flooding** (n=290). The range for all water and sewerage companies was 67%-85% (with a weighted average of 79%).

Reflecting generally positive views of Anglian Water's performance, most household respondents to the Willingness to Pay survey opted to **maintain current performance levels** in relation to sewerage services (between 59%-65% depending on the attribute). Fifty nine percent wanted to maintain current performance for internal sewer flooding while 33% wanted to see this improved. Sixty one percent wanted to maintain performance for external sewer flooding, while 31% wanted to see this improved. Similar proportions wanted to see an improvement in bathing water quality at beaches (32%), though the figure for odour was lower (25%, n=558, combined and sewerage only subsample, DCE). Roughly equal proportions of non-household customers opted to maintain (48%-56%) and improve sewerage service levels (31%-38%), with sewer flooding rated marginally higher as a priority for improvement than other issues (38% external, 36% internal, n=349, combined and sewerage only subsamples).

The Willingness to Pay choice task indicates that in **selecting a package of improvements** to sewerage services, household customers placed the **greatest weight on sewer flooding inside properties (27%).** Sewer flooding to external areas was weighted third (19%) after bathing quality at beaches (22%, n=558). Non-household customers gave the greatest weight to internal sewer flooding and bathing water quality (both 25%). External sewer flooding was ranked next (19% jointly with odour, n=349).

The Main Stage Willingness to Pay survey suggests that customers have a strong preference for avoiding deterioration in service levels, especially in relation to environmental outcomes (e.g. bathing water quality, river water quality and pollution incidents) and aspects of service that have a high and direct impact on customers, such as sewer flooding (inside properties), and severe water restrictions (rota cuts).

In the Water Resources Second Stage research, of the 10 service issues explored as part of the first, "package", element of the survey, **sewer flooding affecting homes, gardens, or nearby public places** was the issue that had affected the **smallest percentage of household respondents.** Fifteen percent had experienced this at some point, 4% in the past year, and 10% in the past five years. Seventy nine percent of household customers had never experienced this. For non-household customers this issue was also ranked bottom in a list of service

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problems experienced (alongside boil notices), however in total **30% of busineses reported experiencing this problem at some point**, 6% in the past year, and 17% in the past five years.

In the same survey, respondents were asked to allocate a potential bill increase associated with improved levels of service across different aspects of Anglian Water's services. Internal sewer flooding was one of the service areas for which household customers made the **lowest allocations** (alongside smart meters and security of supply/drought restrictions). Similar results were found in the non-household survey.

In the segmentation research, 19.5% of the whole customer base that was sampled strongly agreed that they were **willing to pay more now to protect other people from being flooded with sewage** (answering 9 or 10, where 10 is strongly agreed). However, there were some **clear differences of opinion** among different customers. The "comfortable and caring" group (26% of the customer base) were more likely than other groups to strongly agree with the statement (34.7%), while just 0.5% of "eco-economisers" (14% of the customer base) and 4.6% of "protective provincials" (9% of the customer base) strongly agreed.

The valuation research on flooding and roadworks found that water flooding had a slightly larger impact on customers' wellbeing than sewer flooding. The research team suggest that this result may in part reflect the fact that the average water flood tends to affect more people than the average sewer incident. However, they conclude that further research is needed to confirm this hypothesis. To draw stronger conclusions about the impact of water flooding relative to sewer flooding, they also suggest that data is needed that separates out internal and external water flooding incidences.

The research found that internal sewer flooding has less wellbeing impact per incident than external sewer flooding. The research team suggest this is because an internal flood typically affects just one or a few households, even though the impact on those affected is high. An external flood has a much lower wellbeing impact on each affected household, but the number of affected households is much greater, making the total incident value larger.

The valuation research also found that **repeated incidences of (all types) of flooding do not impact as strongly on wellbeing as the first incident**. The authors suggest that further work is needed to explore the hypothesis that individuals adapt to the negative effects of repeated flooding, lessening the incremental impact of later incidents. Possible contradictions with the PR14 Second Stage Flooding research (which found that high frequency flooding of homes was seen as the worst scenario with very high willingness to pay estimates), may warrant further exploration, though could be related to methodological differences. (For internal sewer flooding, results from the valuation study include the impact not only on the property directly affected but also indirect impacts on those living nearby, while stated preference results are based on respondent's impressions of the scale of the impact, as well as any altruistic concerns for properties directly affected. Although results for internal sewer

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flooding in the valuation research are statistically significant, it is also worth noting that the sample size is low at n=85).

In the online community activities specifically focused on sewerage rehabilitation, sewerage problems were seen not just as the product of a deteriorating network; customers spontaneously identified **other people's behaviours as partly responsible for blockages** (in particular the flushing of baby wipes, cooking grease/fat and sanitary products). The fact that 90% of (the 823) people who visited the "beat the bog" stall at the H2OMG event and took part in the poll **pledged to change their own behaviour** appears to confirm customer concern about this issue (though this was not robust quantitative research).

In the segmentation research, 79.6% of the whole customer base that was sampled strongly agreed that it is **unacceptable to flush household/food waste down the toilet** (answering 9 or 10, where 10 is strongly agree). However, again there were some clear differences across the customer base. For example, "tech savvies" (28% of the customer base) were less likely to strongly agree with the statement (57.6%), while "protective provincials" (9% of the customer base) were more likely to strongly agree (92.9%).

Evidence from a number of research and engagement activities suggests there is interest in **Anglian Water doing more to educate customers** about the implications of flushing these products on the network, and the costs involved in carrying out associated works. However, it is worth noting that in the co-creation events, while sewer flooding was considered a "gross out" issue and clearly **struck a chord** with customers, they were clear they **didn't want to be "fear mongered"** about the issue. Customers wanted Anglian Water to get on and resolve the issue without giving customers more things to worry about.

Research and consultation on the draft PR19 business plan, and the measures and targets featured in it, confirm that sewer flooding is a customer priority.

In the Accent acceptability research on Anglian Water's performance commitments and outcome delivery incentives (ODIs), of the company's bespoke performance commitments, household customers placed the highest importance on external sewer flooding (73% saying this was of high importance to them). Household customers in the "comfortable and caring" and "ecoeconomiser" segments were more likely to attribute higher importance to all the performance commitments than other segments. "Tech savvies" were least likely to attribute high importance to the commitments. Non-household customers' ratings followed a similar pattern, with the highest importance again given to external sewer flooding (85%). Non-household customers were more likely to rate all the performance commitments more highly than household customers.

The **consultation feedback** on the draft PR19 plan (with the online community) found that when there was a choice about investment, customers generally prioritised areas that were regarded as central to the service, that impact directly on customers, and that help protect the environment (echoing findings from other research, such as the Willingess to Pay Study). **Top priority issues were burst**

Topic Area & Customer Evidence

water mains and sewer flooding, as these were thought to impact most on customers in terms of disruption and cost.

In the acceptability testing of the outline business plan, customers were asked how important they viewed the following service areas: water mains bursts; sewer collapse; water treatment works and water recycling centre compliance; external sewer flooding; unplanned outages; and properties at risk of low pressure. External sewer flooding was ranked of middling to low importance by both household and non-household customers when considering this particular list of service areas. On a scale of 1-6 (where 6 is most important) it received an average rating of 3.44 from household and 3.41 from non-household customers. The topranked issue for both types of customer was mains bursts (4.85 from household and 5.20 from non-household customers), and the bottom ranking was low pressure (2.21 and 2.30). However, of the recycling measures in the plan, those relating to sewer flooding were ranked of high importance, after the top priorities of sewer collapse (of high importance to 87% of household and 85% of non-household customers) and pollution (of high importance to 86% of household and 87% of non-household customers). Among both household and nonhousehold customers, internal sewer flooding was ranked next most important (83%, 81%), followed by external sewer flooding (68%, 79%), and risk of sewer flooding in a storm (54%, 49%). Reflecting results from other research, there were some differences in prioritisation of these issues among customer groups. For example, those household customers in the "comfortable and caring" segment were significantly more likely than those in the "careful budgeter" group to rate internal sewer flooding of high importance.

In the consultation on the draft business plan with members of the online community, participants were introduced to the company's **proposed commitment to reduce the number of internal sewer flooding incidents**. They were told that by 2020, Anglian Water expects their performance to be 469 incidents. Based on comparative data from other large water and sewerage companies, Anglian Water are proposing a stretch target of 355 incidents by 2025. Participants were **pleased to see the company focusing on area they considered important**, and they viewed 355 as a suitable target (and a good improvement from projected 2020 performance levels). However, some participants **questioned the appropriateness of aiming to "delight" customers in this area**; they felt that being free from sewer flooding was an expectation rather than a reason to be delighted.

Customers were also introduced to the company's proposed commitment to reduce the number of external sewer flooding incidents. They were told that by 2020, Anglian Water expects its performance to be 4665. Based on current industry upper quartile performance, Anglian Water are proposing a stretching commitment level of 4241 (or 15.6 incidents per 10,000 properties). The consultation found that participants were reassured that the company is addressing this issue. The proposed reduction of 400 incidents felt like an improvement, although not necessarily a large decrease. Questions and concerns about the target centred on how this will be achieved, given Environment

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Agency projections of a possible 5%-10% increase in peak rainfall intensity. Some participants questioned if the target might be too stretching given this possibility.

In the acceptability testing of the outline business plan, most customers felt the proposed **targets for sewer flooding were sufficiently stretching**. However, the proportion of customers saying this was **lower than for other recycling targets**. Of all household customers, 53% felt targets on internal sewer flooding were sufficiently stretching (the bottom ranked target), followed by external sewer flooding (54%) and sewer flooding in a storm (55%). The top ranked issue was WINEP (74% of household customers felt targets in this area were sufficiently stretching). Of all non-household customers, 59% felt internal sewer flooding targets were sufficiently stretching (bottom ranked issue), followed by 61% for external sewer flooding. Sixty nine percent agreed targets in relation to flooding in a storm were sufficiently stretching (ranked 6th of 10 measures). The top ranked issue was again WINEP (where 90% of non-household customers felt targets were sufficiently stretching).

In the same research, the vast majority of customers **understood the recycling measures** (88%-98% for household and 96%-100% for non-households). However, for household customers, **understanding was lowest for risk of sewer flooding in a storm (89%)** and embodied carbon (88%).

All

Fair Charges

Value for money, affordability and fairness

What we already know (as at June 2016)

National research commissioned by the Consumer Council for Water found that people are **less well informed about their water services** than they are about other utilities such as energy or broadband. There is lower engagement as customers are not motivated by the drivers of loss or reward that exist in competitive markets. Lack of choice means that customers are less savvy about their water provision and less guarded or vigilant about the service they receive when compared to their other utility providers.

Multiple qualitative research and engagement activities reveal a lot of 'heat' in conversations about price, linked to complaints about 'corporate Britain' and to the state of the economy (many people who took part in activities report feeling 'squeezed'). A common theme running through qualitative evidence streams is that monopoly status means water companies have no incentive to keep prices fair and affordable.

hartlepool Water said they were satisfied with the value for money of their

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service. A higher proportion of Hartlepool water respondents were satisfied with the value for money of their water (85%) and sewerage service (86%) than respondents receiving services from Anglian Water (74% for water services and 76% for sewerage services).

For both companies, the proportion of respondents to the Consumer Council for Water Annual Tracker Survey who felt **charges were affordable increased** between 2013 and 2014, and in this period there was a change in trend as an **increased proportion of customers felt charges were fair** (68% for Anglian Water, 83% for Hartlepool Water).

In the Domestic Customer Survey the vast majority (71%) of respondents said there were either fairly or very satisfied with the overall value for money provided by Anglian Water (52% and 19% respectively). Almost a quarter (22%) of customers gave a neutral response of neither satisfied nor dissatisfied. Customers who have a water meter (74%) were more likely to feel fairly to very satisfied than those who don't (62%), a finding confirmed in the Tracker Survey and Acceptability research. The proportion of customers who were fairly or very satisfied with value for money increased with age. While only 7% of respondents said they were either fairly or very dissatisfied, those in the lowest income group (£15,599 or less, 12%) were more likely to be dissatisfied than customers in all other income bands (where the range was 3%-7%). Those in a household occupied by three or four people (10%) were also more likely to be dissatisfied compared with one (4%) and two person households (4%). Those aged 30-44 (12%) were more likely to be dissatisfied compared with all other age groups (where the range was 2%-7%).

The Community Perception Survey 2015 (year one, wave two) found that 52% of customers agreed with the statement "Anglian Water provides a service that is value for money", while 32% neither agreed nor disagreed, and 16% disagreed.

The Business to Business survey found that over half (53%) of business customers in Wave 3 were either **satisfied or very satisfied with the value for money** they receive for the service provided, compared to 48% in wave two. Just 8% were either dissatisfied or very dissatisfied compared to 12% in wave two. The differences were not statistically significant however. Business customers were also generally satisfied with their bill, with between 70% and 78% indicating that they were either satisfied or very satisfied with each aspect. Customers are also generally satisfied with different aspects of their bill (e.g.the layout of the bill, its accuracy and the frequency received), with between 70% and 78% indicating that they are satisfied or very satisfied with the different aspects.

The Acceptability research found **business customers with light water usage** (57%) were significantly more likely to rate water and wastewater services as good value for money than those with medium usage (45%).

The Consumer Council for Water Annual Tracker Survey in 2013 set out to explore which aspects of service are driving satisfaction with value for money. Referring to findings relating to all water and wastewater, and water only

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companies, (rather than Anglian or Hartlepool Water specifically), the report found that there are no particular service aspects which customers would like to see improved in terms of value for money, although customers do want services maintained. However, it found satisfaction with contact is significantly and positively correlated with satisfaction with value for money, and satisfaction with water and with sewerage services. The report concludes an improvement in this measure could have a positive effect on customer perceptions of value for money.

In the Domestic Customer Survey, respondents were asked to choose three factors (from a given list of 11), which would most increase their assessment of the value for money offered by Anglian Water. **Fixing leaks (61%) was the aspect most likely to increase customers' assessment of the value for money** they receive from Anglian Water. This was more likely to be selected by those in the socioeconomic group B, C1, C2 (61%-66%) compared with those in group E (47%). The 'level of bills' was the second most common answer, mentioned by 46% of respondents. Level of bills was more likely to be selected by customers in the lowest income band (58%) than all other income bands (38%-44%).

The Water Matters survey of household customers across England and Wales run in 2014, found that the **downward trend seen since 2010 in satisfaction with value for money of water services has been reversed,** with three-quarters (75%) of customers now being satisfied (up from 69% in 2013). To put the water industry figures in context, customers are also more satisfied with the value for money of all other household services (except council tax). Energy services in particular have seen a marked increase in satisfaction and are now slightly higher than the water industry (80% electricity and 79% gas).

There is limited other evidence about how customers judge value for money of their water and wastewater services in comparison to other utilities. However, those people involved in qualitative research tended to be quite positive. Participants at the two deliberative events were more likely to say that they were getting fairly or very good value for money from Anglian Water than from their main supermarket or gas and electric supplier. Some customers who took part in qualitative research and engagement questioned the point of reflecting on value for money, as they could not switch provider.

Some more affluent participants in qualitative research said they were unclear exactly what they pay; other household customers (especially low income and disabled people) and some non-household customers (notably smaller businesses and public sector organisations) were much more strongly focused on price.

In the Acceptability research, almost two thirds of the Water and Wastewater customer sample (63%) reported that they **rarely or never have difficulties paying their bill.** Customers aged 60 and over were significantly less likely to have a problem. As would be expected, vulnerable customers are most likely to experience problems paying their bill - 23% said that they often or always find it difficult.

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UK Water Industry Research's report into the impact of welfare reform finds that water debt is on the rise following recent welfare reforms.

What's emerging (Autumn 2016 onwards)

One of the key findings from the customer world focus groups was that **life feels tough** for most customers at the moment. Many customers were very concerned about money, alongside other concerns. Taking time spent discussing the issue of money/affordability as a very rough proxy for importance, the focus group leaders suggested that different customer groups prioritised the issue in the following way (from very important to less important): customers in vulnerable situations; young singles; older families; retirees; customers with English as second language (though the socio-economic mix of this group was unclear); and young families (perhaps because they have got more used to living on a tight budget rather than because the issue was actually less important to them).

In the segmentation research, 54.7% of the whole customer base that was sampled strongly agreed that they **budget carefully for the month** (answering 9 or 10 where 10 is strongly agree) and 42.7% strongly agreed that they **put money aside for the future** and for emergencies. However, again, there were some clear differences in budgeting and saving behaviours. For example, "eco-economisers" (14% of the population) are much more likely to strongly agree that they budget carefully (79%), while only 9.5% of the "family first" group (12% of the customer base) strongly agreed. The "family first" group were also least likely to strongly agree that they put money aside (11.8%).

These differences in budgeting and planning behaviours were confirmed in the online community activities on affordability and vulnerability support. This research found that most customers try to reduce costs where they have some control **over them.** Customers perceive they have most control over things like holidays, luxuries, entertainment, hobbies and interests, and savings, where they can cut back or delay spend, or defer payment using credit cards. They have some control over spend on insurance, food and clothing, utilities (including water), and phone and broadband, where they can shop around for the best deal and switch suppliers (in some cases), reduce consumption and, on occasion, use credit cards if required. They have the least control over mortgage and rent, council tax, and road tax/MOTs, although they can often arrange to pay in installments. The research found that only a minority of participants were excellent planners. Most customers are not taking sufficient measures to safeguard against all eventualities. Those who are poorest at planning tend to: have a low level of understanding of what they need to spend each month, or over the course of the year; be less likely to have savings they can dip into to pay for unexpected items or even large, predictable annual costs (such as car tax or insurance); and so to be more reliant on credit cards, loans, or financial support from friends and family.

Reflecting national trends, the initial Community Research study found that many customers in vulnerable situations were struggling with **unreliable or fluctuating income**, which made it more difficult to plan for monthly direct debits and to supply the evidence to prove eligibility for some low-income reductions. The research also highlighted the difficulties caused when: customers are told their bill will be a

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certain amount (which turns out to be an underestimate); direct debit amounts are not updated (resulting in a deficit on the account); and when customers think payments are being taken direct from their benefits but these have been stopped. In these situations, customers said they wanted companies to proactively contact them as soon as possible.

The online activities on affordability and vulnerability support (with a range of customers in different circumstances) found that customers' perception of whether things were affordable or not was grounded in their level of household income and their aspirations for their lifestyle. A range of pressures could tip the balance between life feeling affordable or not, including: major life changes and transitions (e.g. in employment, life-stage, health); seasonal changes (e.g. holiday/festive periods involving additional spend, increases in fuel costs in winter, year-on-year increases in costs); and more oneoff, "situational" changes (e.g. boiler or car breakdown and vet bills). The research found that consistency in income and outgoings was the biggest factor that allowed customers to feel more in control of their finances, and that Anglian Water can help by ensuring bills are easy to understand, regular, and as consistent as possible. A majority of participants felt that quarterly or bi-annual bills are harder to manage financially and, when received, create more pressure on customers. They noted that there isn't a clear advantage of paying for your water bill (or other utilities) in one go (unlike insurance for example). Paying by direct debit was regarded as helpful as it creates consistency in monthly out-goings. Participants felt that being able to "over-pay" when funds are available would help customers who don't have a consistent income.

The online activities on affordability and vulnerability support found that some groups were especially focused on household expenses, such as those with health problems, families, and pensioners on fixed incomes. However, water bills were not "front of mind" for most participants, compared to other major costs, such as mortgages/rent, cars, food, and gas and electricity. Findings from the focus group on biosolids, which also explored general perceptions of Anglian Water, appear to confirm these results. The researchers concluded that the price point means the water and sewerage service is not viewed as critically as gas and electric.

While some groups of customers in vulnerable situations are facing extremely challenging financial pressures, two (of the four) dedicated studies exploring vulnerability (the initial Community Research and the Accent studies) suggest that water bills are not often top of these customers' minds either. As is the case for other customers, they tend to be much more concerned about rent and other utility bills (gas and electricity), which are higher and fluctuate more.

Results from the Community Perception Survey for this year (2017/18), indicate that 48% of household customers agreed with the statement that "Anglian Water is a company that provides a service that is value for money" (n=1334). Similar results were found in previous years (50% in 2015/16, 49% in 2016/17). In the three waves of research that took place between August-December 2017, the top reason given for disagreeing with this statement was a view that the service

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was expensive; between 51% and 67% of customers who disagreed with the statement gave this reason. Similar results were found in year one and two. (Note, the base for this second question was 62 in August, 61 in October, and 45 in December 2017. The base in year one was 232 and in year two it was 242).

When customers in the Community Perception Survey were asked what more Anglian Water could do to improve opinions about how it cares for communities, lower prices were only mentioned by 7% of customers this year (n=1421). However, it is worth noting that results were a statistically significant increase on 2016/17 figures of 5%, and the proportion of vulnerable customers giving this answer (10%, n=313) were significantly higher than for the core sample (6%, n=1080).

The Main Stage Willingness to Pay survey seems to indicate **broadly similar results on value for money**. Fifty three percent of household customers rated the value for money of their water and sewerage services as either good or very good, while 35% were equivocal. Just 9% said they felt the services were either poor or very poor value for money (n=1353, all subsamples, DCE and BWS surveys). A majority of non-household customers also felt their service was value for money (54%), with 33% providing equivocal responses and 10% feeling they received poor value for money (n=500, all subsamples).

The latest set of figures from the CCWater Water Matters research for Anglian Water appears to paint a more positive picture on value for money. In 2017/18, 79% of customers said they were satisfied with the value for money of their water services (n=387). The range for all water and sewerage companies was 54%-82% (with a weighted average of 72%). Figures for Anglian Water suggest an upward trend in satisfaction over the past seven years. In 2017/18, 78% of Anglian Water customers said they were satisfied with the value for money of their sewerage services (n=355). The range for all combined service companies was 58%-84% (with a weighted average of 75%). Figures for the past seven years again indicate an upward trend in satisfaction for Anglian Water customers. In the same research, 81% of Anglian Water customers in 2017/18 said they felt their total water and sewerage charges were affordable (n=389). The range for all combined service companies was 61%-81% (with a weighted average of 74%), placing Anglian Water at the top of the range. Once again, this represents an upward seven year trend. In 2017/18, 67% of Anglian Water customers felt their charges were fair (n=380). The range for all combined companies was 39%-67% (with a weighted average of 61%), again placing Anglian Water at the top of the range of combined service companies.

Results from the same survey for customers of Hartlepool Water also indicate very positive results. In 2017/18, 83% of customers were satisfied with the value for money of their water services (n=144). The range for all water-only companies was 63%-83% (with a weighted average of 72%), placing **Hartlepool Water the top of the range** on this question. In 2017/18, 79% of customers said they felt their water charges were affordable (n=147). The range for all water-only companies was 66%-87% (with a weighted average of 77%). Over the same

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period, 68% of customers felt their charges were fair (n=145). The range for all water-only companies was 52%-75% (with a weighted average of 62%).

Despite these generally positive views about value for money, the focus group with customers in Hartlepool found that the **water bill was considered as important as other utilities** and customers were very keen to know how to go about reducing it. The researchers found that participants were highly conscious of money and very price-sensitive. Getting through the month on a budget was a daily preoccupation, and participants were actively choosing products, services and activities that helped with this.

The analysis of social and digital media for the period 1st February 2017-31st January 2018 also found that **money and bills were a key talking point**. The largest audience segment on forums (making up nearly half of forum conversations) were found to be budget-conscious consumers, who were looking for money-saving opportunities, or to find ways out of debt or to improve flagging credit ratings. The issue of high bills featured in 260 conversations on social media during this time, with a potential reach of 28K people. The research found that **water costs were a contentious topic**, with customers seeking to understand how water rates are calculated and how costs compare between different regions of the UK. The issue of bills and affordability was also the **area of Anglian Water's business performance that most customers were interested in** the August 2017 wave of this year's Community Perception Survey (of interest to 53% of the 250 customers who took part in this question).

Other research suggests it is **not just household customers who are concerned about costs**. The analysis of social and digital media found that (after budget-conscious household consumers) the second biggest community involved in discussions about Anglian Water on forums were professionals. Farmers were particularly engaged, in particular on thefarmingforum.co.uk, where some expressed the view that Anglian Water charged **high fees for field supplies**. During a series of meetings with Anglian Water staff, retailers were asked **which aspects of Anglian Water's service (linked to their assets) they felt were most important**. Cost (as well as consistent supply/no interruptions) was a key issue, highlighted by three of the five retailers.

The segmentation research revealed that across the whole customer base, 76% of customers rarely or never experience difficulty in paying their water bill. Eighteen percent sometimes experience difficulties, and just 3% always or often experience difficulties. However, the research found some differences between customer groups on this question. Customers in the "comfortable and caring" segment (26% of the customer base who are more likely to be social class AB and 55+) were most likely to say that they rarely or never have difficulty paying their bill (82%), while the "family first" group (12% of the customer base who are less likely to be social class AB and more likely to have children under 16 living at home) were least likely to say this (66%).

In the latest set of figures from the CCWater Water Matters research (from 2017/18), a relatively high proportion of customers said they were likely to **contact**

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Anglian Water if they were worried about paying a bill (72%, n=387). The range for all water and sewerage companies was 65%-80% (with a weighted average of 72%). However, this **represents a downward seven year trend** for Anglian Water.

hartlepool Water customers said they would contact the company in these circumstances (n=146). The range for all water-only companies was 65%-81% (with a weighted average of 74%), placing **Hartlepool Water at the bottom of the range**. Results for Hartlepool Water for the past seven years also suggest a **downward trend**.

In the online community activities on affordability and vulnerability support, participants grouped water along with other utilities as relatively low risk when it comes to bills going unpaid. More informed customers were aware that water cannot be cut off. With other utilities, customers assumed they could be cut off, but only after a substantial escalation process. Participants were more worried about not paying their council tax, for fear of losing monthly payment privileges, generalised anxiety about "the taxman", and the potential impact of being "black-listed". They were most concerned about not paying their mortgage, rent or personal loans, as this would lead to substantial fines, and impact negatively on credit scores and their ability to secure loans in future.

Participants in the online activities had an **expectation that Anglian Water would be fairly lenient** with them if they were not able to pay their bills, and would work with them to come to an appropriate solution. This was driven by a **perception of Anglian Water as a progressive company** that is flexible and collaborative, and by an understanding (among a more informed audience) of some of the special requirements placed on water companies. While this flexibility was valued, the research found that it did not affect customers' decisions about whether or not to pay their bills. For most customers it was very important to keep up with payments; getting into heavy arrears was not something they would support.

In the Acceptability research on the Strategic Direction Statement, customers were introduced to **Anglian Water's six major challenges** (climate change, population and economic growth, environmental protection, affordability and customer expectations, planning for the future, and markets, structure and financing of the industry). Customers felt the **most important was affordability and customer expectations** (89% saying this was important). This was particularly important to "protective provincials" and "careful budgeters".

There was a consistent theme in terms of the elements that customers would like to see more of from Anglian Water in the Strategic Direction Statement, including: customer education; technology/smart metering; flooding; the environment and pollution; and affordability. Of Anglian Water's 10 outcomes, 'fair charges' was voted 3rd most important (seen as important by 92% of customers, where the top ranking outcome was voted as important by 97% and lowest by 67%).

In the acceptability testing of Anglian Water's proposed **performance** commitments and outcome delivery incentives (ODIs), the bespoke

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commitment on **gap sites and voids** was **ranked last in order of importance** (of 11 commitments spanning water, waste and customer service areas) by both household and non-household customers (judged as important by 27% of household customers and 32% of non-household customers).

However, (household) customers from the online community who took part in the consultation exercise on the PR19 draft plan were concerned about this issue. They were told that when household properties that are connected to the network are identified as being unfurnished and having no consumption, these are classified as "void" and are not billed, until the situation changes. When a property becomes occupied but continues to be classified as "void", the occupier is not charged and this results in a cross-subsidy from those customers who are billed. Participants were told that Anglian Water is proposing a commitment level on the basis that 10% of its long-term void properties are actually occupied (which translates to 0.25% of all properties in the customer base). This compares to figures of 25%-40% for poor performing companies. The consultation found that this goal felt logical and fair to participants; there was concern about customers subsidising people who are not paying their bills. The 10% target felt ambitious compared to other companies' performance levels. Customers were quick to point out that installing meters on these properties would make it easier for Anglian Water to know immediately if water were being used. Some participants questioned why the company can't access information on occupancy from local councils.

In the acceptability testing of the outline business plan, of the retail measures tested, managing void properties was also ranked **last in order of importance** by non-household customers (of high importance to 33%, where the top ranked measure, the vulnerable customer priority register, was of high importance to 67%). For **household customers, managing void properties was ranked higher** (of high importance to 43%, after vulnerability support on 79% and the customer measure of experience on 66%). Both household and non-household customers felt the **targets on void properties were sufficiently stretching** (73% of all household and 80% of all non-household customers agreed, making this the top ranked customer service measure for perceived stretch).

All

Future bill levels

What we already know (as at June 2016)

Some people who took part in conversations on the DDD website and responded to the consultation expressed a strong view that bills should be reduced (however this was without comment on how this would affect service levels). Across several qualitative evidence streams, a small minority of participants say they think water is either too cheap or will need to become more expensive in future, to reflect what they perceive to be increasing scarcity.

Many customers who took part in qualitative research and consultation appear prepared to pay a little more to tackle future challenges. However this was

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usually dependent on monies going to support improvement (not profit) and Anglian Water 'doing their bit' to tackle leaks and safeguard the service for the future. In general, participants in these activities wanted Anglian Water to fund additional activities and improvements from profit, before asking customers to pay more.

In the Domestic Customer Survey, respondents were asked to complete the investment simulator. The vast majority of respondents (87%) made choices that resulted in a **small increase in their annual water bill**; on average this was an increase of 1.28% from £423 to £428.43. On average customers from single person households settled for the largest increase in their bill compared with larger households. Customers who indicated that they had a meter were also more likely to settle for an increase compared with those who do not.

The PR14 Willingness to Pay Survey is the most robust source of information on this topic. It found that, on average, household customers are willing to pay up to £30 per annum extra and business customers up to 5% extra for a defined package of service improvements.

In the Acceptability research, customers were asked how they felt about the forecast bill level for 2020. Overall, a majority of water and wastewater respondents (68%) said that they felt the **forecast bill level was 'about right'**. Hartlepool Water customers were most likely to say this (81%). Around two-fifths of future customers (40%), water only (38%) and vulnerable customers (38%) were of the opinion that it was 'too high'. **Heavy water users (48%) were significantly more likely than light or medium users (25% and 27%) to say that projected bills were 'too high'**.

The Acceptability research indicates that three quarters of water and wastewater customers (76%) would **prefer bills to change steadily** throughout the period from 2015-2020 (rather than change every year in response to the amount of work conducted, or 'front-loaded' with a big step-change in year one).

Some household customers who took part in qualitative research and engagement activities are particularly keen for the company to **avoid any sudden increases** in their bills. Some also want greater choice and flexibility in payment arrangements.

What's emerging (Autumn 2016 onwards)

Evidence cited in the Board debrief report on the strategy development process suggests household customers were willing to pay between 10 and 20 percent more in their bill to improve the service and avoid serious problems in the future. (However, this was not robust pricing research).

The Willingness to Pay Main Study provides the most accurate evidence on the amount customers are willing to pay for a package of future improvements. Results from the "package valuation" element of the (DCE) survey suggest that household customers may be willing to pay between £19-£27 per household per year (including zero protest responses) and £29-£35 (excluding protest responses) for a package of service improvements. (Values are

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slightly higher using the BWS version of the survey). These results can be interpreted as the 'benefits ceiling' for the average household customer, representing their maximum willingness to pay to improve services. Analysis of customer valuations by different segments (by income, receipt of Watersure/Water care tariff, age, socio-economic group, disability and Anglian Water customer segment) shows that most segments' willingness to pay lies within the bounds of the average willingness to pay results. In line with expectations, lower income is associated with lower willingness to pay. Package valuations for non-household customers are in the range of 8%-9% of annual bills (including protest responses) and 11%-13% (excluding protest responses).

hartlepool—Water A comparison of results from the Main Stage Willingness to Pay survey shows that willingness to pay values for Hartlepool Water household customers are consistent with the overall sample for the whole Anglian Water region (there is overlap in the 95% confidence intervals).

When participants were asked for the **reasons for their responses in the choice task**, the most commonly reported rationale for householders and the second most common for non-household customers was **value for money** – i.e. they **opted for the most improvement relative to cost** (household DCE survey 19%, BWS survey 21%, non-household survey 15%). The most common rationale provided by non-household customers (17%) was that they had **opted for packages that provided improvements in those service attributes that they felt were particularly pertinent**. This reason was slightly less important to household customers (DCE 10%, BWS 14%). Selecting options that had the most direct benefit was the second most important choice for household customers (DCE 15%, BWS 16%). This was also important to non-household customers (12%). Choosing options with the least associated cost was also a prominent motivation for household customers (DCE 18%, BWS 10%) and non-household customers (8%).

Respondents to the Willingness to Pay survey who mainly opted for the 'no change' options in the choice task were asked a follow up question about their reasons for this. Feedback suggests that most status quo choices were largely based on motivations related to satisfaction with current service levels or to affordability (57% for DCE and 46% for BWS household respondents, and 52% for non-household respondents). While protest-type responses (related to the cost of water bills, company performance and profits) drove a sizeable minority of status quo choices for both types of respondent (between 34%-41%), the study authors conclude that overall this relates to relatively small numbers of customers.

Reflecting findings from the Main Stage Willingness to Pay survey, results from the Water Resources Second Stage research suggest customers from the highest socio-economic grade (AB) have a higher willingness to pay for improvements. However, possibly in contrast to the Willingness to Pay survey, this research found that a combined grouping of "comfortable and caring", "family first" and "tech savvies" had a higher willingness to pay than the base group of "protective provincials" and "eco-economisers". Similar differences between non-

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household respondents (when grouped by sector) were not found. The study found that for both household and non-household customers the **key reasons for choosing the improved package** was that the bill increase was affordable, as well as a desire to protect the environment and deliver improvements (particularly in **water services**, **which appear to be a more important driver than waste services**). Among household customers, the most popular **reason for rejecting the set of service improvements** was affordability and a concern with higher bills (followed by the the idea that water companies already make enough profit as it is). Concern about water company profits was the top reason provided by non-household customers (closely followed by the idea that the water company should pay, and then by objections to paying higher water bills).

In several pieces of other recent research, customers were presented with a range of **scenarios for the future**, each of which featured a **different level of investment** in major resilience and/or infrastructure improvements, along with a corresponding bill impact. They were then asked to choose between these scenarios. Findings from these studies suggest that **most customers support options that involve "going beyond the minimum" to invest for the future.** However, uncertainty about future risks, and affordability considerations, mean that not all customers support the maximum level of investment under consideration.

In the online activities on water resource management, household customers were presented with three investment options for the future: protecting against drought but not climate change (costing £2.20 extra per customer per year by 2025); protecting against drought and climate change (costing £8.30 per customer per year by 2025); and future-proofing plans by building larger water system capacity than is needed right now to protect against climate change risk (costing £10 per customer per year by 2025). This research found that the **future-proofing** option garnered the most support. In the context of the annual bill, £10 did not feel like a great deal of money to protect the water system against future risks. The research found that although climate change was not universally accepted, option three felt like a substantial investment in the infrastructure, which customers thought would also help in the context of housing growth in the region. The research found some differences in opinion between customer segments on this topic with, for example, the "family first" group slightly more keen on investing just in climate change, and "eco-economisers" in drought-only options or in doing nothing.

In the second Community Research study on vulnerability (which explored customer reactions to Anglian Water's draft PR19 business plan), customers were introduced to three (differently framed) options for investment, with associated bill impacts. Assuming an average household bill of £412 in 2019-2020, with efficiency savings of £16, the options were: minimal additional investment in climate change and environmental improvement (resulting in likely annual bills of £455 in 2025, including inflation); additional investment in climate change *or* environmental improvement (leading to likely annual bills of £466 in 2025, including inflation): or additional investment in climate change *and* environmental improvement (leading

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to likely annual bills of £478 in 2025, including inflation). For each option, customers were asked to factor in a possible £20 reward or penalty (resulting in a corresponding decrease or increase in the bill) for reducing leakage, at the cost of £4 per household per year. Overall, the majority of participants preferred the second option (additional investment in either climate change or environmental improvement). This was seen as a good balance between taking some preventative action, while keeping cost rises under control, and recognising the uncertainty around the possible impacts of climate change. In most groups, there was strong minority support for option one (minimal additional investment), primarily on the basis of affordability. In half of the groups, there was strong minority support for option three (investment in both areas). Participants supporting this option felt the company needed to act now in relation to climate change and environmental protection; some hoped significant investment now might head off sharp bill increases in future. The majority of participants also supported the £4 charge to support improvements in leakage, as they didn't want water going to waste and felt the additional cost was minimal. The research found some differences in levels of support for these options among different groups of customers. Older people (in Skegness) were especially sensitive to the cost of living and rising prices, in the context of limited increases in the value of their pensions. Affordability was also an issue of particular concern in the groups held with young women (in Ipswich) and those on low-incomes (in Corby and Hartlepool).

hartlepool were presented with a different bill profile, with smaller projected bill increases (partly due to Hartlepool Water sourcing most of its water from boreholes). These assumed an average bill in 2019-20 of £356, with efficiency savings of £11. The bill profiles were then (including inflation): option one, £381; option two, £387; and option three, £396. The same potential reward/penalty applied for performance on leakage. The research found that low income participants in Hartlepool were more open to the options involving proportionately greater investment. Even though participants expressed concerns about rising bills, by the end of the discussions, none of them chose the first option, and equal numbers chose options two and three. However, after agreeing to pay for option three, some customers felt it was a bit much for Anglian Water to ask them for an additional £4 to pay for leakage improvements. There was least support for this in the Hartlepool Water focus group.

In a poll carried out as part of the consultation exercise on the draft PR19 plan with members of the online community, participants were again presented with three scenarios: a minimum investment scenario, with an associated annual bill of £412; a scenario in which the company invests in *either* environmental improvements *or* climate change, with a bill of £422; and a scenario in which they invest in *both*, with an annual bill of £433. Overall, **most customers supported option three** (the maximum investment position). This was thought to be the best option by most participants as it covered all the important issues, felt the most ethical and socially responsible, and offered much more in terms of benefits than the middle option (with only a small increase in cost). The first option was generally viewed

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as **false economy** (deferring issues rather than dealing with them now). The second option felt like a moderate, cautious and cost-effective approach to some, but felt **short-sighted** to others. However, while generally supporting option three, some customers questioned **how accurately Anglian Water can forecast the future** and how much flexibility there is to change tack if necessary. Some participants said that if they had been given the choice, they might have **preferred a course of action between options two and three**. Confirming the results of other research, a **majority of customers supported the proposed additional investment in leakage**. The notion of Anglian Water investing more to continue to be a leader in this area was popular. However, participants **didn't want to see their bills continue to rise simply because the company wants to "be the best"**. The proposal was supported so long as the additional investment was around £4 per household per year. A potential rise of £20 felt too high.

Various pieces of research have explored in more detail customer views about the phasing of investment, and how the costs should be shared between current and future customers. Generally, this evidence seems to suggest more customers support investing and making payments earlier, however sizeable proportions of customers disagree.

In the acceptability research on the outline PR19 business plan, customers from the online community were again presented with three potential investment scenarios, with associated bill increases. In the first scenario, customers were told there would be no potential bill increase over the period 2020-2025, but investments would be deferred, which could make them more costly in future. After 10 years, customer bills will have risen from an average of £412 to £433 to pay for the investments needed. In the second scenario, there would be a potential increase of £10 over 2020-2025 that would allow some but not all investments to be made (with some of the costs to be applied to customers' bills at a later date). After 10 years, customer bills will have risen from £422 to £433. In the third scenario, there would be a potential increase of £21 in the average bill over the period 2020-2025 that would allow Anglian Water to implement all of the investments set out in their business plan. From 2026-2030 bills would stay at £433, as all required investments will have been made and paid for over the previous five years. Overall, the research found that more customers preferred to have all investments made and paid for over AMP 7. Among household customers, between 44%-65% supported this option, depending on the company/region. Cambridge Water customers were significantly more likely than Anglian and Essex & Suffolk Water customers to support the £21 increase (65% as opposed to 44% and 48%). Customers in the "family first" and "comfortable and caring" segments were significantly more likely than other segments to support the £21 increase. Similar results were found for non-household customers. More than half (53%) supported the £21 increase, and these results were unanimous across businesses of all sizes.

The same research found that household customers generally prefer the costs of dealing with climate change to be reflected in bills as work is undertaken, however a sizeable proportion wanted costs to be spread

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over a longer period of time. Between 36%-56% of household customers (depending on the company/region) preferred the costs to be reflected in bills as work is undertaken, while 30%-46% preferred the costs to be reflected in bills over a longer period of time. Anglian and Cambridge Water customers were significantly more likely than Essex and Suffolk Water customers to want costs to be reflected in bills as work is undertaken (45% and 56%, as opposed to 36%). Hartlepool Water customers were significantly more likely than Cambridge Water customers to prefer bill increases over a longer period (46% rather than 30%). Customers in the "family first" segment were also significantly more likely than "protective provincials" to prefer a bill increase over a longer period. Among nonhousehold customers, 46% wanted to see the costs reflected in bills as work is being undertaken over the next five years, while 50% wanted the costs to be spread over a longer period.

Customers who took part in the online community discussions on financial fairness were introduced to Anglian Water's past strategy of keeping current bills low, by spreading the cost of assets over their lifetime. They were then informed that with new technology the lifetime of assets is shortening, and so the company is proposing a new strategy to avoid costs being unfairly placed on future generations by ensuring current customers pay their fair share. The research found that most customers appreciated that the nature of the company's assets had changed and supported paying them off sooner. It found that the small group of customers who were very knowledgeable about financial matters were strongly supportive of "sensible amortising". The "handful" of customers who didn't approve of the strategy only did so when they didn't fully understand it. However, although the proposed new strategy was generally perceived as sensible and fair, customers were concerned with asset longevity, and were keen to see assets used to their full potential before being replaced. Some customers felt that the changing nature of the asset base is an issue for Anglian Water and its shareholders to deal with, rather than customers. While customers appreciated Anglian Water's efforts to be transparent and forthcoming with information about its investment strategy, some felt this did not need to be actively "broadcast" to all customers. The researchers concluded that, by and large, customers trusted Anglian Water to "just get on with managing their assets" in the best way they can.

The consultation on the draft PR19 plan with the online community revealed that the majority of participants (68%) backed a "pay as you go" approach to asset investment (however, note this is not robust quantitative research). They felt it was fairest to spread the cost of investment across current and future customers, rather than for future generations or current customers alone to foot the bill. However, participants still felt that it was important to build in sufficient flexibility to be able to "wait and see" what the future holds. Some participants emphasised that it is very difficult for Anglian Water to predict the future, especially given Brexit and likely changes in government policy. Some had concerns that if customers were asked to pay more upfront it will go into shareholders' pockets. Others felt that it was unfair for a smaller current customer base to be

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asked to pay so much when, in proportion, future customers will pay less as costs are shared among a larger number of people.

In some pieces of research, customers were asked more explicitly if they were willing to pay more now to protect future customers, and results are mixed.

In the Willingness to Pay Survey, 83% of household customers indicated that they strongly agreed or tended to agree with statements concerning the pro-active replacement of pipes and sewers to avoid storing up problems for future generations. However, just 37% agreed that it is right that customers should pay more today to help ensure future customers do not experience worse levels of service, with much less distinction on this question between those that are neutral (32%) and those that disagree (29%, n=1353, combined subsamples, DCE and BWS surveys). Fewer non-household customers opposed paying more today for the benefit of future customers (21%, n=500, all subsamples).

The segmentation research found that across the whole customer sample 62% were willing to pay more to secure water supplies for future generations (answering 6-10, where 10 is strongly agree), and 22.8% strongly agreed (answering 9 or 10). However, there were some clear differences in opinion on this topic. For example, the "comfortable and caring" group (26% of the customer base, more likely to be social class AB and 55+) were more likely to strongly agree with this statement (37.6%), while "eco-economisers" (14% of the customer base, also more likely to be 55+) were much less likely to do so (2.9%).

Several pieces of research suggest that customers generally prefer to avoid sudden increases in their bill. For example, participants at two of the future customer workshops emphasised that careful phasing and planning of new initiatives and investments was important, to avoid bill increases that were too large, or too sudden. In the consultation on the draft PR19 plan with members of the online community, some participants also expressed concerns about rapid bill increases, especially on the vulnerable, and those on low-incomes.

In the Acceptability research on Anglian Water's **performance commitments and ODIs**, two thirds (61%) of household customers initially said they preferred "**in-period**" **bill changes** (with "careful budgeters" liking this the best, 69%). Non-household customers were more evenly split (53% preferred this). Reasons for preferring in-period bill changes were that bills would be more immediate/accurate and fairer, and that this would avoid large increases at once. However, this preference was replaced with a preference for "**end-of-period**" increases once customers were given more information about how performance commitments were measured and reported. A majority of customers were also in favour of having a **buffer zone** (69%), to allow some flexibility and reflect the fact that some issues are outside of the company's control. Customers also supported **capping of potential rewards/penalties** (74%).

While performance commitments and ODIs were not a focus for the second Community Research study on vulnerability, facilitators at the focus groups touched on the potential for bills to increase or decrease depending on the rewards or penalties arising from ODIs. Some participants were **not pleased to hear that**

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they would be asked to pay more when their water company exceeded its targets, particularly when they perceived the company would benefit anyway (e.g. in relation to leakage, both in a reward payment from customers and a saving from fixing leaks and therefore losing less water).

Feedback from the consultation on the draft PR19 plan with members of the online community suggests that customers generally **understand that Anglian Water's performance will be affected by factors outside of its control**. However some participants **interpreted the notion of a buffer as a reason not to need to meet the target**.

In the acceptability research on the outline business plan, most customers felt the plan was affordable, and perceived affordability increased once customers were more informed. Among household customers, perceived affordability increased from 64% (either very affordable or affordable) to 71%. Among non-household customers, it increased from 71% to 79%. Household customers of Hartlepool Water were significantly more likely to say the outline business plan was very affordable than customers of Anglian, Cambridge, and Essex and Suffolk Water. Customers in the "family first" and "tech savvy" segments were also significantly more likely to say the outline plan was very affordable. Business customers from the "IT and communications" sector were significantly more likely to say the plan was not very affordable than those in the "manufacturing", "wholesale and retail" and "finance and insurance" sectors (uninformed). Businesses with large water bills were significantly more likely to say the plan was not at all affordable (uninformed) and unaffordable/very unaffordable (informed) compared to those with small and medium-sized bills.

In the same research, most customers felt the +/- £20 per annum RoRE payment (return on regulatory equity for ODI rewards) was affordable. Informed affordability was 60% for household customers (with a further 24% saying it was neither affordable nor unaffordable). For non-household customers it was was 65%, with a further 24% stating it was neither affordable nor unaffordable. (Check)

AII

Tariffs and charges

What we already know (as at June 2016)

Some household customers who took part in qualitative research and engagement activities said they found their bills, and the basis for charging, unclear or confusing.

In the Consumer Council for Water Annual Tracker Survey for 2014, 17% of household customer respondents receiving services from Anglian Water and 13% of those receiving services from Hartlepool Water had contacted the company with a query in the last 12 months, a drop on the previous year. **Billing queries** and reporting leaks were the main reasons for this contact.

Evidence from multiple qualitative research and engagement activities suggests a desire for more for tailored information from Anglian Water about the

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best deal for individual households. Some household and business customers would like the company to explore other ways of incentivising lower use and recycling of water (beyond metering).

This finding is supported by national research commissioned by the Consumer Council for Water which suggests that water companies need to take responsibility for conveying information that customers would not know to ask at the point at which the customer could benefit e.g. special tariffs for those experiencing financial hardship, and basic information about billing or metering to those new to independent living.

What's emerging (Autumn 2016 onwards)

Analysis of Anglian Water's **complaints data** for the period 1st April 2017-31st March 2018 reveals that 6591 written complaints were received from customers during this time. The **second largest proportion of these complaints related to charging** (28%, or 1867 complaints).

In this wave of research and engagement, there appears to be **mixed evidence** about the clarity of tariffs and bills.

Figures from the CCWater Water Matters research for 2016/17 for Anglian Water reveal that 87% of customers agreed that their **water bill is clear** (n=363). The range for all water and sewerage companies was 80%-89% (with a weighted average of 85%). Eighty-two percent of Anglian Water customers agreed that it was **clear how the final amount is reached** (n=373). The range for all combined service companies was 75%-87%, with a weighted average of 81%.

In the same research, 83% of Hartlepool Water customers agreed that their water bill is clear (n=145). The range for all water-only companies was 79%-92% (with a weighted average of 83%). Eighty percent of Hartlepool Water customers agreed that it was clear how their final bill amount was reached (n=141). The range for all water-only companies was 71%-92%, with a weighted average of 77%. (Note, this question does not appear to have been asked in 2017/18).

However, despite these positive findings, evidence from the first Community Research study on customers in vulnerable situations suggested that **some customers are confused by descriptions of tariffs** that mention charge per cubic meter and annual standing charges. The analysis of social and digital media conversations that mentioned Anglian Water, (for the period 1st February 2017-31st January 2018), also revealed that confusion about which tariffs customers should be on was a common topic of discussion (accounting for 10% of mentions). The **phasing out of the SoLow tariff** was a source of particular concern on social media.

During a series of meetings between Anglian Water staff and five major retailers, customers were asked whether they felt that **Anglian Water's wholesale tariffs** were easy to understand. Opinion was mixed among the four retailers who responded to this question. Two felt the tariffs were clear (with one commenting that they were highly preferable to the "falling block" tariffs also used by wholesalers). One felt that the tariffs were not particularly easy to understand, but

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	were comprehensible "once you made the effort". Another felt they were not very clear, although no less so than tariffs from other wholesalers. Retail customers were also asked if they felt Anglian Water's wholesale tariffs promote water efficiency . Only three of the five retailers answered this question and responses were again mixed. One felt that this was unproven. Two felt that the Profile and Profile Plus tariffs were either too "punitive" or too "a blunt stick" (especially given that end-users in some sectors are not yet prioritising reduced consumption).	
	As highlighted above, the analysis of social and digital media identified that water costs were a contentious issue on social media, with customers seeking more information about how water bills are calculated and how costs compare between different regions in the UK.	
	In the second Community Research study on vulnerability (which tested reactions to the draft PR19 business plan) participants found the "what your bill pays for" handout particularly interesting, as it gave them a quick overview of where their money goes. They were keen to see this information from Anglian Water on a more regular basis. Few participants had anticipated running costs, such as salaries, interest repayments and energy costs. Knowledge was greater if people had experienced longer working lives, particularly in white-collar jobs, or had run their own business. Some were disappointed that more of the bill was spent on interest payments (20p of the £1.15 that water and sewerage cost the average household per day in 2017/18) than on maintaining Anglian Water's equipment (16p). In most of the groups, some participants expressed surprise that profit was relatively low compared to other cost areas (5p per day), however others pointed out that this added up to a large amount over the whole customer base.	
All	Additional (financial) support for vulnerable customers	
	What we already know (as at June 2016)	
	Participants in qualitative research and engagement demonstrated awareness that certain groups may have particular needs for water and/or difficulties in paying their bills . There was some concern about levels of non payment.	
	However, there was little awareness of the additional (financial) support that is already available for those customers who struggle to pay their bills.	
	In the Consumer Council for Water Annual Tracker study 2014, 78% of household respondents who were customers of Anglian Water said they were likely to contact the company if they were worried about paying their bill (up from 68% in 2013). Ten percent were aware of the Water Sure tariff (down from 13% in 2013). Among customers of Hartlepool Water, 77% of household customer respondents said they were likely to contact the company if they were worried	

about paying their bill (down from 79% in 2013), and 9% were aware of the Water

Many participants in qualitative research and engagement activities supported additional assistance for those struggling to pay. However, this view was not universally held. Some felt these customers were already supported through the

Sure tariff (steady from 2013).

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tax and benefit system; others felt they should take more responsibility for effective household budgeting.

Among participants in qualitative research and engagement, there were mixed views about **who should be responsible for funding this** additional support (many would like Anglian Water to pay; others see this as a responsibility for Government). There was some concern about the impact of providing support on other customers' bills (especially in the current economic climate).

Participants in qualitative research and engagement expressed a range of views about which types of customers should be eligible for financial support. The groups most often mentioned were the elderly, disabled people, and people with certain medical conditions. Evidence suggests differences in opinion about how need should be assessed and whether this is a job for the company or for Government (e.g. through the benefits system). Across several evidence streams, some participants expressed concerns about using benefits receipt as eligibility criteria.

The **social tariff** consultation found that in the Anglian area, 58% agree with the idea that people who genuinely struggle to pay their bills should be helped by funding from others who can afford their bills. In the Hartlepool area, 42% agree. The results also found high levels of support for the individual financial assessment: 79% of those who expressed an opinion in the Anglian area support the use of an **individual financial assessment** and 66% of those who expressed an opinion in the Hartlepool area felt the same. Further to this, respondents were asked to indicate the extent to which they agree or disagree with Anglian Water's proposed levels of discount (20% to 80%). Sixty four percent of those who expressed an opinion in the Anglian area **agreed with the proposed level of discount**; 67% of those who expressed an opinion in the Hartlepool area agreed.

During the social tariffs consultation, and after being reminded that any social tariff would be funded by other customers, respondents were shown a series of show cards with **possible contribution values** and the approximate number of households the different contribution levels would help. In the Anglian area, the **proportion of respondents accepting the contribution increased somewhat as the level of contribution decreased,** i.e. at the £6 level, 47% of those who expressed an opinion accepted the contribution compared to 62% at the £1 level.

hartlepool area acceptance of the contribution level also increased as the contribution amount decreased, i.e.at the £3 level, 42% of those who expressed an opinion accepted the contribution compared to 54% at the 50p level.

There is fairly limited evidence on the extent of altruism or support for measures to deal with serious service failures that only affect a small number of customers. Across the few qualitative evidence streams where this was explicitly addressed, many participants are supportive, though some feel they have already paid in their bill to fund this. A small number of participants queried whether there would be support for cross-subsidising customers out of region (e.g. across the Anglian Water/Hartlepool Water boundary). As highlighted above, in

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the PR14 Willingness to Pay Survey, willingness to pay values per property for tackling sewer flooding are high, indicating that this is an area where customers would like to see improvement and are prepared to be altruistic towards the small number of people affected.

What's emerging (Autumn 2016 onwards)

Overall, several pieces of research have found that water bills are not top of most people's minds. Even those customers in vulnerable situations are far more concerned about their rent and other utility bills (such as gas and electricity), which are higher and tend to fluctuate much more. However, it is worth noting that when customers in the Community Perception survey were asked what more Anglian Water could do to improve opinions about how it cares for communities, the percentage of vulnerable customers saying **reduce prices** (10%, where n=313) was significantly higher than results for the core sample (6%, where n=1080). In addition, in the analysis of social and digital media content (for the period 1st February 2017 - 31st January 2018) the largest audience segment active on forums was found to be budget-conscious consumers looking for **opportunities to save money, get out of debt and improve flagging credit scores.**

In the latest set of figures from the CCWater Water Matters research (from 2017/18), a relatively high proportion of customers said they were likely to **contact Anglian Water if they were worried about paying a bill** (72%, n=387). The range for all water and sewerage companies was 65%-80% (with a weighted average of 72%). However, as indicated above, figures for Anglian Water suggest a **seven year downward trend.** In 2017/18, 65% of Hartlepool Water customers said they would contact the company in these circumstances (n=146). The range for all water-only companies was 65%-81% (with a weighted average of 74%), placing **Hartlepool Water at the bottom of the range**. Results for Hartlepool Water also indicate a **seven year downward trend**.

Confirming findings from previous customer engagement and research, the two Community Research studies on vulnerability found **very limited awareness of Anglian Water's special tariffs.** Raising awareness of special tariffs (and other "specialist assistance") was the strongest message that came out of this and several other studies when customers were asked what the company could do to better support customers in vulnerable situations in future.

The CCWater Water Matters research provides regular quantitative data on awarenesss of special tariffs. The latest data (from 2017/18) found **awareness of the Watersure tariff** among Anglian Water customers was 11% (n=400, figures include don't know responses). The range for all combined companies was 5%-18% (with a weighted average of 9%). Figures for Anglian Water suggest a **seven year upward trend. Awareness of other company-specific social tariffs** was 6% (n=400), with the range for combined service companies between 3%-7% (weighted average of 5%).

hartlepool Water customers was 7% (n=150, figures include don't know responses). The range for all water-only companies was 6%-17% (with a weighted

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average of 9%). Figures for Hartlepool Water also suggest a **seven year upward trend**. Awareness of other company-specific social tariffs was 3% (n=150), with the range for all water-only companies between 2%-7% (with a weighted average of 3%).

The second Community Research study found those customers who did know about Anglian Water's special tariffs felt that the company had done a **good job of understanding their circumstances and support needs** when they had registered. A few people who took part in the first Community Research study were paying off **water bill debts** to firms such as Orbit and Fidelite and felt patronised and badly treated for having to pay back their bill plus an additional amount. However overall, most customers who took part in this study reported a positive experience of dealing with Anglian Water and felt listened to and treated fairly. Participants in the online community activities focused on vulnerability also felt the company **excelled in the provision of support**.

Almost all participants in the initial Community Research study were enthusiastic about the idea of water companies using DWP as a conduit for getting information to those who might be eligible for special tariffs. While other studies found more evidence of concerns about data-sharing, this study found most customers were not particularly concerned as they understood it was only their postcode that was being shared with DWP and the Department would not share any information about customers with the water company. Customers from the online community who took part in the consultation on the draft PR19 plan were also supportive of Anglian Water doing more to help those in need to claim benefits and other assistance they are entitled to.

In addition to special tariffs, the dedicated studies on vulnerability suggest a number of **other improvements** that might help support customers in vulnerable situations, including: allowing them to make smaller payments and spread payments; providing payment keys (as is the case for gas and electricity); and working with housing associations and councils to make water payments part of rent or take them directly from benefits.

Overall, research suggests there is support for special tariffs and additional services for those facing particular challenges. For example, the acceptability testing of the outline business plan found that when customers were asked about their views on a range of retail measures, 79% of household customers and 67% of non-household customers said support for customers in vulnerable situations was of high importance to them, making this of greatest importance among the retail measures (Note, 67% of non-household customers relates to the priority register). As highlighted above, in the acceptability research on Anglian Water's performance commitments and outcome delivery incentives (ODIs), household customers placed high importance on the bespoke commitment on vulnerable customers (67% said it was of high importance to them, ranked second after external sewer flooding on 73%). Non-household customers' ratings followed a similar pattern, with vulnerable customers again ranked second (on 70%), after external sewer flooding (ranked of high importance by 85%).

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However, research also indicates that **support for these customers is not without caveats and limitations**. In the online activities on vulnerability, for example, while a large group said they were willing to pay to support others, they **drew the line at providing financial support that resulted in a big impact on bills.** In the Twitter and Facebook polls on vulnerability, 70% (of the 344 customers taking part across both polls) said they would be willing to pay £2 extra a year to fund more specialist support for vulnerable customers. Most of the customers taking part in the online activities on affordability and vulnerability support also said they would be in favour of a small increase in vulnerability support. However, the total £23 non-eligible customer fund felt higher than many customers had anticipated and, while learning about it did not affect acceptance for some, for a large majority this made them more resistant to supporting others. The research found that some customers were particularly critical, and that they were skewed towards the "protective provincial" group. (Note, neither the poll nor online activities provide representative data).

These results appear to be confirmed in the segmentation research, where 53% of customers across the whole sample agreed that they were **willing to pay more to subsidise others** (answering 6-10, where 10 is strongly agree), and 17.9% strongly agreed (answering 9 or 10). However this research found some clear differences of opinion about the question across the customer base, with 28.8% of the "comfortable and caring" group (26% of the whole customer base) but just 9.4% of "protective provincials" (who make up 9% of the whole customer base) strongly agreeing with this statement.

In the online community activities on vulnerability, and the second Community Research study on this topic, there was a strong view amongst some participants that billing support was a responsibility of Government, rather than the water company. This view was also highlighted in the online activities on affordability and vulnerability support, where some of the older customers complained about this as a form of "indirect taxation". Some customers in all these studies also felt that Anglian Water should fund support out of profit, not from customers' bills.

In the online activities on vulnerability, there was some support for social tariffs for those who need long-term support (e.g. for a disability), or short-term lower tariffs (if there was a genuine, short-term difficulty in paying the bill). However, those already covered by universal credit or specific benefits were most likely to be identified as groups that should not be helped further. The online activities on affordability and vulnerability support found that there was greatest support for initiatives that helped more people (e.g. flexibility in payments and the three concessionary tariffs), as there was a perception that these will have more impact overall and will help to prevent bad debt. Some participants in the online activities on vulnerability felt that flexibility in payments was something that should be on offer to all customers, not just those in vulnerable situations. Some also felt that social tariffs did not incentivise behavioural change (and might actually act as a disincentive to save water). They wanted Anglian Water to focus on providing support that encourages lasting change to behaviour.

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Findings from several pieces of research, including the online community trial and online activities on affordability and vulnerability, suggest it is important to customers that Anglian Water **distinguishes between those who "can't pay"** and those who "won't pay". Some customers would like further information from the company about how it makes these judgements. The second Community Research project on vulnerability found that customers in vulnerable situations were themselves concerned that additional support should only be available to people who really need it. Participants were wary of people "playing the system".

In the on-line community trial, messaging around "tackling bad debt" by moving people to social tariffs was well received and seen to position Anglian Water in a positive light as a company that is flexible and responsive to all customers' needs. However, in the online activities on affordability and vulnerability support, discussions about the recovery of bad debt created the strongest negative response among participants. Customers emphasised that they were going to considerable lengths to pay their own bills, and so were critical of having to support others who are perceived not to have made the same effort. There was an assumption that those who fall into bad debt may be simply refusing to pay or may not be in genuine need of support. This is where a majority draw the line and think government should step in via the benefits system. It did not feel like customers' responsibility to fund others in this situation, especially if they are already on benefits (where the assumption is that this should cover people's expenditure).

The consultation exercise on the draft PR19 plan with customers from the online community found that participants generally supported the plan and the specific proposals relating to vulnerable customers. However, reflecting other research, some customers drew the line at providing financial support for vulnerable customers (in the form of concessionary tariffs), feeling that this was a role for government, rather than the water company.

Raw water resources, Raw water distribution, Water distribution, Developerled growth, IS

Metering

What we already know (as at June 2016)

The Consumer Council for Water Annual Tracker survey 2013 indicates that Anglian Water customers are **significantly more likely to say they have a water meter** (67%) than customers of water and sewerage companies in other regions (except customers in the South West region and Southern regions who also have high rates of metering, 75% and 63% respectively). Just 29 percent of Hartlepool Water customers have a meter (the range for water only companies is 29%-82%).

The Delivering into Water report commissioned by the Consumer Council for Water, which draws on organisational performance data provided by water companies, also indicates that Anglian Water (alongside South West Water) has comparatively high percentages of metered household customers (in excess of 70%). The report notes that for Anglian Water, this is primarily due to the

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company's **targeted metering schemes** and promotion of the meter option. When it comes to Hartlepool the report suggests the percentage of metered household customers is markedly lower (32.2 in 2013-14).

hartlepool When it comes to rates of metering for non-household properties, the same report indicates that 98% of Anglian Water customers had metered properties in 2013-14, which is highest proportion of any water company. When it comes to Hartlepool the proportion was 72.6 in 2013-14, which is the lowest proportion.

Household customers involved in several qualitative research and engagement activities suggested that being on a meter **focuses their minds on water use** and encourages saving.

When customers involved in qualitative research and engagement were asked what fairness meant to them, their immediate reaction tended to be that it is **fairest to pay for what you use**. However, as highlighted above, customers who took part also acknowledged (sometimes on further reflection) that some people may have particular needs for additional water/difficulties in paying (a more contextual view of fairness).

Across a number of qualitative research and engagement activities there is **strong feeling against compulsory metering**. The exception to this is the consultation, where most responses on this topic expressed support for compulsory metering (however responses cannot be assumed to be representative as respondents are self-selecting). Of those people who responded to the consultation, **people already on a meter were more likely to be in favour of compulsory metering.**

The Domestic Customer Survey found opinion was finely balanced on the question of compulsory metering. Fifty two percent of respondents think the decision about whether to switch to a meter should be voluntary (33% think people should make the decision in their own time, 19% feel that Anglian Water should encourage people to make this change). Forty seven percent of respondents think that everyone should be made to switch to a meter (26% felt they should do this as soon as possible, and 21% felt this change should be phased in over time to allow for people to adjust to changes in their bills). Those without a meter were more likely (than those with a meter) to say the decision should be voluntary and people should make the decision in their own time. Households with five or more people were also more likely (than those with fewer people) to say this.

In the Acceptability research, 95% of the core sample of water and waste water customers felt the **company's metering plans** were acceptable. However, the vulnerable customer group viewed this element of the proposed plan significantly less positively than other groups with 19% saying that they found the company's proposals with regard to metering unacceptable. Future customers and those already on a water meter were significantly more likely to find this element of the plan acceptable. Among the 133 respondents who found the metering plan unacceptable, the top two reasons were **polar opposites** (22% thought it 'should not be imposed', while 17% thought 'all customers should be on a meter').

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Evidence from multiple qualitative research and engagement activities suggests that some household customers are **confused about whether they would be better off on a meter or not**; many people want more information about this. Some customers are sceptical about Anglian Water's 'switch-back' promise.

The Business Unit Report 2015/16- October suggests meters and metering were the 7th most **common source of complaints**, year to date, out of 11 categories. As in previous rounds of the Business Unit report, the most common complaints on this topic relate to the condition, location or readability of meters; a few household customers who participated in qualitative research and engagement identified similar issues.

Thirty seven percent of account managed and 27% of non account managed respondents to the Business Customer Satisfaction survey said they had experienced a problem with their meter in the past 12 months. There appears to be some room for improvement in how the company deals with meter problems (satisfaction for account managed businesses is currently 3.1, and for non account managed businesses 3.33, out of 5).

Across several (qualitative and quantitative) evidence streams some household and business customers express an **interest in having more accurate**, **up to date**, **and convenient meter readings** to enable them to manage their use more effectively. However, when participants at the deliberative events and in the consultation were presented with information about the costs involved in installing **smart meters** many felt these outweighed the benefits. Some felt the **benefits would accrue largely to Anglian Water** (and therefore they should foot the bill and/or share the benefits with customers).

What's emerging (Autumn 2016 onwards)

Evidence from recent research and engagement suggests **most customers are supportive of metering**, because it is offers the potential to save money, focuses minds on reducing consumption, and is perceived as fairer. However, customers are not uncritical of meters and metering.

In the focus group held with customers of Hartlepool Water, the researchers found that the **potential of water meters to help save money** captured the group's attention. Participants were keen for the company to do more to publicise the potential benefits of being on a meter for this reason. In the online activities on water resource management some customers said they had found that their bills were lower having switched to a meter, although they recognised that this might not be the case for everyone.

Analysis of the 244 conversations that took place on social media between 1st February 2017 and 31st March 2018 that mentioned metering revealed that consumers generally supported the idea, but they were critical of some of the accompanying problems, such as **meter leaks, unexpectedly high bills, and poor installation.** The same research also found that high bills featured in 260 conversations during this time, with a potential reach of 28K people. Sixteen percent of these conversations referenced water meters, driven by speculation

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that metered customers subsidise usage in other, more expensive regions, as well as the perception that living in a hard water area leads to more expensive bills.

Analysis of Anglian Water's **complaints data** reveals that between 1st April 2017-31st March 2018, the company received 6591 written complaints. There were 477 complaints about meters (or 7% of the total).

The latest data from the CCWater Water Matters research (from 2017/18) found that 71% of Anglian Water customers were **aware of the free water meter scheme** (n=105, question was filtered on un-metered households and includes don't know answers). The range for all water and sewerage companies was 63%-80% (with a weighted average of 69%). Figures for Anglian Water show a **seven year upward trend in awareness**. **Awareness of the 24-month trial period for water meters fitted at customers' request** was 30% in 2017/18 (n=105), with the range for combined service companies between 20%-37% (with a weighted average of 28%).

Hartlepool Water customers was 70% in 2017/18 (n=108). The range for all water-only companies was 60%-79% (with a weighted average of 69%). This represents a **seven year upward trend in awareness** for customers of Hartlepool Water. In 2017/18, awareness of the trial period was 36% (n=104), with the range for all water-only companies between 19%-41% (with a weighted average of 24%). Again, this represents an **upward trend for Hartlepool Water over the past seven years.**

In much recent research and engagement, the issue of **compulsory metering** seems to divide opinion.

The online community trial found that overall customers were **strongly supportive of having meters in all households**, to increase awareness of water use and decrease consumption. The online community activities focused on water resource management also found that most customers now bought into compulsory metering, with the **key motivation being fairness**. This reason was also emphasised in other research, including at one of the future customer workshops.

Despite these findings, in the Twitter poll held as part of the H2OMG water festival, just 51% of the 2924 customers who took part agreed that all homes should have a meter fitted, while 30% disagreed, and 19% said they were not sure. At the "magnet maze" stall at the same event, customers were asked for their views on eight deficit reduction measures and asked to pick their top three. Compulsory metering was only was the fourth most popular choice, picked by 12% of customers. (Leakage was the most popular, picked by 22% and transfers the least popular, picked by 4%). Anglian Water staff noted that that in conversations about compulsory metering the "fairness" argument was made both in support of and against the measure. (Note, these activities do not constitute robust quantitative research).

Participants at one of the future customer workshops pointed out that people with large families, or with gardens, may not be happy to have a meter. They felt that

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this measure should be introduced gradually, as they felt most people are not keen on change.

The Water Resources Second Stage research provides some of the most robust evidence on this topic. In the options survey, prior to completing the main choice tasks, customers were asked for their top three water resource options and their views on the options that should not be used. Among household customers **compulsory metering had some support** (9% of the total score available, compared to 5% for optional metering, where the top choice was leakage reduction at 19%). However, it **also had a high likelihood of being selected as an option that should not be used** (17%, where the "top" choice was desalination at 19%). Among non-household customers, after leakage reduction, compulsory metering was one of the next most popular choices (along with recycling/re-using treated sewage). However, it was also the second most frequently chosen option that customers did not want to see, after desalination.

In the actual choice tasks in the Water Resources options survey (which provide a measure of the relative strength of customer preferences for the full range of options, relative to a base, and expressed as odds ratios), results indicate that household customers prefer compulsory metering to optional metering. The authors suggest that this finding may be driven by the large proportion of respondents that had meters fitted (71%). The data does not suggest a difference in preferences between compulsory and optional metering for non-household customers. There is some marginal (weak) evidence (p<0.1) that household customers from higher socio-economic grades (AB) place greater weight on encouraging optional metering (along with incentives and customer education, and transferring water) than do the base group.

A vast majority of the customers who took part in the online activities on water resource management agreed that a strategy that works towards 95% coverage of meters by 2035 felt achievable and realistic. Participants felt this would also have the benefit of giving Anglian Water better data on which to plan and manage future demand. A minority of participants disagreed. Some were concerned about the impact of the goal on the vulnerable (who may be hit with higher bills after switching to a meter). Others said that 2035 felt too far away, and wanted Anglian Water to do more sooner.

The online activities focused on drought resilience found that **if Anglian Water** decides not to make meters compulsory, customers will expect to see other proof of water saving investments that are more effective than just encouraging high water users to reduce their usage.

There is mixed evidence on customers' views of smart metering and remote control of water in recent research and engagement, however there seems to be greater enthusiasm for these measures than there was at PR14 (although it is difficult to make direct comparisons as research and engagement methodologies differ across the two time periods). Perhaps unsurprisingly, support for smart meters seems to be particularly marked in research activities that have taken place online. Some groups appear to be much less keen on smart meters than others.

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The qualitative interviews for the segmentation research found that customers were **attracted to self-service ideas** as these: were similar to models in the gas and electric industry; provided opportunities to monitor use and save money; avoided the inconvenience of meter reader visits; and potentially also limited contact with Anglian Water. However, strong reservations were expressed by a notable minority who were concerned about the difficulty of reading some meters and the added responsibilities for home owners.

At the H2OMG water festival, customers who visited the information desk were asked to vote on the question "do you want a smart meter?" In total, 1012 customers cast a vote and 72% said yes, 16% said no, and 12% said they were not sure. (However, note, this was not robust quantitative research).

This positive result appears to be confirmed in the segmentation research, where across the whole customer sample 69% gave a positive response to the question about being **willing to have a smart meter** (answering 6-10, where 10 is strongly agree) and 44.7% strongly agreed (answering 9 or 10). However, the research found that opinion about this issue **varied among different customer groups**. Among "careful budgeters", for example, (who make up 11% of the total customer base and tend to be under 35), 63.5% strongly agreed that they were happy to have a smart meter, while only 32.1% of the "comfortable and caring" segment (26% of the customer base who tend to be social class AB and 55+) said the same.

The leaders of the co-creation events found that smart meters were **one of the most talked about ideas that customers came up with for encouraging behaviour change** and engaging customers in debates about scarcity. Customers liked the idea of being informed about water use in real time. The online community trial also found that many customers were now **pushing for smart meters** and smarter billing. Smart meters were perceived to be a good preventative measure against the rising costs that may flow from resilience and carbon reduction initiatives.

While some of the research conducted for PR14 found customers felt the benefits of smart meters largely accrued to Anglian Water, results from the online trial suggest that having an App/smart meter is now associated with **multiple benefits**, **primarily for the customer** (who will be better able to reduce usage and cost). While some research suggests customers are concerned about the potential impact of compulsory and smart meters on elderly and vulnerable groups, the Accent research on vulnerability found that some **people in vulnerable circumstances** regarded smart meters as a potential solution to help them manage their water use and finances more effectively. (However, in this research, too, it was clear that some people found technology more intimidating).

In the online community activities on smart water, customers who already had a smart meter identified a **range of benefits**, including: being more informed about consumption (monthly reports helped them to compare their water use to that of similar households); having an incentive to cut back on use (customers felt that smart meters promote saving as you pay for what you use); and feeling more in

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control (customers felt that the meters help them to take early action to reduce their use, rather than feeling powerless after receiving a large annual bill).

In terms of motivations for installing a smart meter, along with financial savings and the chance to make more informed choices, customers in this research mentioned peace of mind (using smart meter data to help detect leaks) and the potential to use the meters as a tool to educate the family (helping to inform children about how much water is used in common household activities).

The online activities on water resource management also found that smart meters were generally perceived as the way forward. However, this research found that smart meters were **less appealing to those who already feel they use very little water, and to older groups** who don't feel the need for additional information on real-time usage. Some participants also pointed out that their experience of using fuel smart meters was that they had not always encouraged reduced consumption. Some had concerns about the **additional costs of smart meter installation, tech failure and possible data breaches.**

The online community activities on smart meters found that although customers overwhelmingly agreed that smart meters are a worthwhile investment, they want clear information on who is eligible for one, the installation process, and the costs involved. Some customers were concerned that they will end up paying more than unmetered customers who use the same amount of water. Customers also want to be reassured about the technical features of smart meters, and the costs of maintaining them or dealing with problems if they go wrong.

The research also found that **in an ideal world, customers want real-time data** that tells them exactly where and when they are using water and which activities use the most, and which can help instantly identify a leak. However, if real-time data is not possible, participants felt weekly data would be useful to identify patterns.

As part of the online activities on smart meters, the research team tested customer reactions to **Anglian Water's smart meter welcome letter**, a sample monthly report, and the My Use Portal. Overall, reactions to the three materials were positive, positioning Anglian Water as a future-facing and fair organisation.

The **welcome letter** was well received. Customers felt the personalised tips and comparative information would help them to understand their water use and change their behaviour. However, they wanted more information about eligibility, costs and the installation process (as outlined above). They also felt it was important to reassure customers who were less "tech savvy" that online access will not entirely replace print.

Customers felt that the **sample report** set out data in a clear and transparent way, and made clever use of information about water use in other households to encourage behaviour change. However, some customers felt the **water saving tips included in the report were too generic**. Some were also keen for Anglian Water to do more to explain how taking action translates into financial savings (e.g. not running the tap saves £x).

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Although customers expected to be able to access data online, those with smart meters showed **little awareness of the My Use Portal**, and felt this was not given sufficient profile in the monthly reports. The online water use comparisons resonated strongly with customers; they especially liked the clear breakdown of what a cubic meter of water equates to. However, they felt the "how you're doing" section could provide more information, for example helping customers to compare their progress against last month's usage figures. Although customers felt there was room to improve signposting to the water saving tips on the portal, they were pleased to see a wide range of measures included, and felt these could justifiably be considered personalised (unlike those in the sample monthly report).

In the segmentation research, 35% of customers across the whole sample gave a positive response to the question about wanting to **control their water remotely** (answering 6-10), while 16.2% strongly agreed (answering 9 or 10). However, among "tech savvies" (who make up 28% of the customer base), 28.5% strongly agreed that they would like to control water remotely, while just 4% of the "comfortable and caring" group felt the same.

Participants in the Hartlepool Water focus group advocated the development of a water App to help customers manage their own water use. However, participants at two of the future customer workshops were divided in their opinion about the potential usefulness of an App. Some felt customers were unlikely to take the time to download this in the first place. In the qualitative interviews conducted as part of the segmentation research, most customers felt that any mode of feedback (of readings) was acceptable, with convenience the key driver. However, a minority of customers had concerns about the storage space required by infrequently used apps and/or stated a dislike of text messaging.

When asked to **imagine their lives in 2050**, customers who took part in the main online community trial felt that smart meters and remote control of water will be the norm. They felt that by this point in time, most functions in the home will be controlled by automatic sensors or via mobile devices, reducing the need for active interaction with appliances. The final report of the online community trial concluded that **smart meters are an expectation for the future**, as they will improve saving, tracking and environmentally-friendly behaviours.

In the Acceptability testing on the Strategic Direction Statement, one of the areas that customers consistently said they wanted to see given greater emphasis in the document was technology/smart metering. When customers were introduced to Anglian Water's seven long-term goals, seven percent wanted some additional elements to be added, including smart meters. The online community trial also found that customers were interested in hearing more from Anglian Water on this topic.

The online activities specifically focused on drought resilience found that the vast majority of customers supported further investment to ensure a consistent water supply to homes during a drought. However, **accepting a rise in costs** was dependent on Anglian Water investing in the infrastructure, and doing all it can to

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conserve water, as well as providing customers with the tools to save water too (including through provision of smart meters).

Despite quite a bit of evidence of interest in, and support for, smart meters, in the Water Resources Second Stage research, when asked to allocate a potential bill increase across seven areas of Anglian Water's water and waste services, smart metering was one of the areas that received the lowest bill allocation from both household and non household customers (along with internal sewer flooding and, for household customers, security of supply).

In the consultation on the draft PR19 plan with the online community, a few specific elements of the plan stood out to participants as being particularly exciting. These included plans for advanced metering, which were thought to indicate a shift towards greater availability of data to help both customers and Anglian Water to manage water more effectively in future. While these plans were generally supported, however, some participants (such as those in the "comfortable and caring" segment) were more critical of having to pay for aspects of the service that they did not consider to be "core" water company functions, including smart meters.

Raw water resources, Water treatment

Safe, Clean Drinking Water

Overall importance

What we already know (as at June 2016)

Participants in several qualitative research and engagement activities identified that delivering high quality, safe, clean drinking water is a **fundamental expectation of the company**. For example, at the Customer Forum events held in 2015 "providing safe reliable and clean drinking water" was rated as the most important responsibility for Anglian Water by those who attended.

Customers who took part in the PR14 Willingness To Pay Main Study focus group research suggested that **all clean water attributes were very important**, but taste, odour and discolouration were mentioned most frequently. Evidence from several qualitative sources suggests it is very important to customers to know immediately if changes in the quality of water are likely to have impacts on health.

Evidence from qualitative research and from the Business Customer Satisfaction survey suggests that it is particularly important to business customers that they have a plentiful, continuous, supply of water at a **reasonable pressure**.

What's emerging (Autumn 2016 onwards)

In the acceptability research on the Strategic Direction Statement, customers judged safe, clean water as the most important of Anglian Water's ten outcomes (97% saying this was important).

Relevant To Business Portfolio	Topic Area & Customer Evidence
	Participants at one of the future customer workshops were keen to point out that safeguarding quality across the distribution system is critical to customer satisfaction .
	Before being asked the main set of questions about restrictions and water resource options in the Water Resources Second Stage survey, customers were asked a "package" of questions about their experience of various aspects of Anglian Water's service, whether they were willing to pay for a set of improvements, and how they would allocate the bill impact to the different service areas. When asked for their reasons for choosing the set of service improvements, after the fact that the bill increase was affordable, customers cited a desire to protect the environment and deliver improvements, particularly in water services, which appeared to be a more important driver than improvements in the waste service .
	The Main Stage Willingness to Pay research suggests that customers think all of the attributes tested in the survey (relating to water, sewerage and wider services) are important. In relation to water services, tap water aesthetics (discolouration) and unplanned interruptions were the most important attributes for household customers (61% said these were very important), just marginally ahead of leakage (60%), and rota cuts (56%, n=854, combined and water only subsamples, DCE and DWS surveys). Non-household customers also felt the most important attribute was tap water aesthetics (61%), followed by interruptions (57%), rota cuts (55%) and leakage (53%, n=253, combined and water only subsamples).
	In selecting a package of improvements relating to the water service, the Willingness to Pay (DCE) choice task indicates that household customers gave the greatest weight to leakage (26%) and change in the bill (24%). Discolouration accounted for 16% (above rota cuts but below unplanned interruptions, n=551). Non-household customers also placed the greatest weight on leakage (29%) and severe water restrictions (22%), with less weight given to change in the bill (19%). Discolouration was ranked joint last with unplanned interruptions (both 15%, n=253).
	However, when asked to allocate a potential bill increase to different aspects of Anglian Water's services as part of the Water Resources Second Stage study "package" question, household customers allocated the greatest percentage to addressing problems with the aesthetics of tap water. Allocation results for the non-household survey indicate that this was also ranked fairly high, though behind leakage reduction, security of supply, and interruptions (depending on the version of the survey).
Raw water resources, Water treatment	Overall satisfaction with current water quality and reactions to improvement plans What we already know (as at June 2016)

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Evidence from several qualitative and quantitative sources indicates that **current** water quality is generally regarded as good.

Organisational performance data compiled by the Consumer Council for Water indicates that Anglian Water's drinking water quality stood at 99.96 across 2011, 2012 and 2013. This is slightly above the industry average of 99.95 but is just below the EU Drinking Water Directive standard set in 2013, which was 99.97%. In the Hartlepool region quality stood at 100% across 2011, 2012 and 2013.

The PR14 Willingness to Pay Survey indicates that, among household customers, **Hartlepool Water customers are the most satisfied** with the quality of their water.

In the Domestic Customer Survey, respondents were asked to choose (from a given list) which aspects of the service would most improve their satisfaction with value for money. 'Drinking water quality' was the third most popular choice (of 11, after leaks and bills), mentioned by 45% of respondents. Drinking water quality was more likely to be selected by those who don't have a meter (53% compared with 42%); by households with 5 or more people (57% compared with 41-48%) and by those in socio economic groups D (56%) and E (59%) compared with B (36%) and C1 (39%).

What's emerging (Autumn 2016 onwards)

In the online community activities focused on catchment management, participants demonstrated an awareness that water quality can be affected by many factors, including: nature (e.g. animal faeces, bacteria associated with decomposing plants and animals); human activity (e.g. chemical waste from vehicles, rubbish, waste from beauty products, cleaning products and cooking fats); and industry and farming (e.g. chemical waste from factories, pesticides, and illegal dumping of waste and chemcials).

Qualitative interviews conducted as part of the segmentation study suggest that generally positive views of Anglian Water are driven by a perception of **good water quality and reliability**, as well as the company's understanding and patient approach to billing, timely provision of information and of acceptable levels of contact.

Analysis of Anglian Water's complaints data for the period 1st April 2017-31st March 2018 reveals that 6591 **written complaints** were received from customers during this time. Just 2% (or 156) related to quality issues.

Recent quantitative evidence on the **safety of water** suggests **the vast majority of customers are satisfied with current performance.** The latest data from the CCWater Water Matters research (from 2017/18) found that 94% of Anglian Water customers were **satisfied with the safety of their water** (n=391). The range for all combined companies was 86%-97% (with a weighted average of 92%). 2017/18 figures for Anglian Water represent a **statistically significant increase in satisfaction from last year's results** (of 88%).

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The CCWater Water Matter research also found high rates of satisfaction among Hartlepool Water customers. Data for 2017/18 indicates that 95% were satisfied with the safety of their water (n=147). The range for all water-only companies was 87%-98% (with a weighted average of 91%).

Results from the online community trial suggest that some customers are keen for Anglian Water to persuade them of the **benefits of drinking tap rather than bottled water**, in order to cut down on the mass consumption of plastic. In order to convince customers, participants thought it would be important to address common issues with tap water that were driving consumption of bottled water, including concerns about taste and calcium content.

The co-creation events found that Anglian Water's plans to improve the quality of drinking water in future were received positively; customers felt reassured by what they perceived to be the company's commitment to achieving the very best quality possible.

In the acceptability research on the Strategic Direction Statement, customers were introduced to the company's **seven water quality and customer satisfaction goals** (zero pollutions and flooding, zero leakage and bursts, 80 litres per person per day, 100% compliant and chemical-free water, 100% customer satisfaction, energy neutrality, and a circular economy). **Achieving 100% compliant and chemical-free drinking water was considered the most important goal** (95% of customers felt this was important).

Quotes from customers who took part in the online community suggest that some customers would like to **know more about what Anglian Water is doing** to safeguard water at source, including specific targets and timescales.

In the consultation on the draft PR19 plan with customers from the online community, participants were introduced to Anglian Water's plans to achieve zero failures to comply with water quality performance measures (compliance risk index). Participants felt that this was the right priority. Maintaining water quality was felt to be an essential ambition for the company to have. Plans to achieve the target by working closely with farmers, businesses, and stakeholders were also received positively as a more proactive approach than focusing on treatment alone. However, a minority of participants questioned whether the company can rely on farmers to change their behaviour, and therefore if the target might be too ambitious. Participants were also keen to see a clearer link between the plan and some of Anglian Water's current, successful, initiatives, such as Slug it Out.

In the acceptability testing of the outline business plan, of the range of water measures tested, **mains bursts followed by leakage** emerged as the issues of high importance to the greatest number of participants (82% and 68% for households and 81% and 79% for non-household customers). The compliance risk index measure was seen as of high importance by 52% of household and 65% of non-household customers (the water measures ranked lowest in importance were, for households, the AIM on 36% and, for non-household customers, per capita consumption, low pressure and single supply, all on 44%). **Most customers**

Relevant To Business Portfolio	Topic Area & Customer Evidence
	felt the compliance risk index targets in the draft plan were sufficiently stretching (63% of all household and 83% of all non-household customers). However, the proportion of household customers thinking the target was sufficiently stretching was the lowest for all of the water targets. Household customers of Hartlepool Water were significantly more likely than Anglian Water customers to think some of the targets were sufficiently stretching, including the compliance risk index target.
Raw water	Specific issues with current water quality
resources, Water	What we already know (as at June 2016)
treatment	The PR14 Willingness to Pay survey identified that the most frequent problems with the water service for both household and business customers relate to the aesthetic quality of tap water.
	Evidence from multiple sources reveals some complaints about water hardness ; the PR14 Willingness to Pay survey identifies that both household and business customers are least happy with this aspect of their water service. However, qualitative research and engagement suggests that many customers accept hardness is a feature of the local environment and are not particularly concerned about it (though some people are concerned about the costs associated with it, e.g. damage to household appliances).
	Investment in water softening divided opinion among respondents to the domestic customer survey who were asked to complete the investment simulator. Half (51%) wanted to maintain the current spend (of zero) on water softening, while the other half (49%) wanted to invest. However, overall the average level of investment chosen was just 14% of the possible total investment. On average, customers from single person households opted for a higher level of investment than those from multi-occupancy households. Customers from socioeconomic group E were also more likely to call for an increase in investment in this area than those from groups B, C1, C2 and D. Water softening was the 7 th most popular choice (of 11 factors) that respondents said would increase their assessment of value for money (selected by just 16% of respondents).
	There is evidence from qualitative research and engagement activities that some people have concerns about chemicals added to drinking water, as part of the treatment process.
	When customers at the deliberative events were presented with information about lead in pipes they expressed surprise and concern about the possible impact on human health. Most customers were supportive of the idea of grants to help customers (especially the 'vulnerable) meet replacement costs. For some customers, it was equally or more important to be able to stagger payments over a period of time.
	The Avertive Behaviour Study found that three in five (59%) household customers were using or purchasing substitute products and/or taking actions to improve the guality of their tap water. Of these respondents, most were buying bottled

the quality of their tap water. Of these respondents, most were buying bottled

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water or products that filter or soften water. Respondents had a range of reasons for taking action; a quarter said they did this as they disliked the taste, smell or appearance of their tap water.

What's emerging (Autumn 2016 onwards)

Participants at one of the future customer workshops seem to have been particularly concerned about the company ensuring water is free from **bacteria** and harmful living organisms, as well as using as few chemicals as possible to treat water. Results from the main online community trial suggest that some customers are especially concerned about chemicals in the water supply. This appears to be a particular concern of the "eco-economiser" customer segment.

As highlighted above, the Willingness to Pay survey found that the majority of household customers have not experienced any problems with their water or sewerage services in the last five years (72%). For those that had, an issue with the water supply was the most commonly experienced problem (15%). Just 8% of household customers had experienced a problem with their sewerage services in the same period (n=1353, all subsamples, DCE and DWS surveys). A smaller proportion of non-household customers had experienced no problems with their service in the past five years (55%). In contrast to household customers, problems with the sewerage service (14%) were as common as those with the water service (15%, n=500, all subsamples, DCE survey).

A total of 220 household respondents reported experiencing a problem with their water service. Of these, the most commonly cited problem was a concern about the aesthetic quality of tap water (taste, smell or appearance) or hardness (53% or 116 respondents). This was followed by one-off low pressure incidents (33%, 72 respondents), and a supply interruption without prior warning (32%, 71 respondents). Twenty five percent of these respondents had experienced an interruption with prior warning, 19% a leak in the street, 17% low water pressure all the time, and 5% had received a boil notice. (Combined and water only subsamples, DCE and BWS surveys).

For the 81 non-household customers who had experienced a problem with their water service, concerns about the aesthetics of water were also the most common issue (75%, 61 respondents), followed by occasional low pressure (37%), and planned (35%) and unplanned (33%) interruptions. Twenty two percent of these respondents had experienced constant low pressure or a leak in the street. Twelve percent had experienced a boil notice.

Results from the initial "package" of questions asked of respondents to the Water Resources Second Stage survey also found that in the majority of cases, household customers had never experienced any issues (with their water or waste service). However, problems with the look, taste, or smell of tap water were also among the more recently experienced issues (13% had experienced this in the past year, while 21% had experienced low pressure and 2% had received a boil notice). Thirty five percent reported experiencing problems with aesthetics at some point in the past (while 57% had experienced a hosepipe

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ban and 15% had experienced sewer flooding). **Similar results were found for non household customers**. Fifteen percent had experienced problems with the look, taste, or smell of tap water in the past year (while 18% had experienced low pressure and 6% said they had experienced a hosepipe ban, boil notice or sewer flooding). Forty four percent of non household customers said they had experienced problems with aesthetics at some point in the past (while 63% had experienced an interruption and 30% had experienced sewer flooding).

Although problems with the aesthetic quality of water were among the most commonly experienced problems, recent evidence suggests the vast majority of customers are satisfied with the quality of their water in this respect. The latest data from the CCWater Water Matters research (from 2017/18) found that 95% of Anglian Water customers were satisfied with the colour and appearance of tap water (n=400). These results placed the company at the top of the range for combined companies (this was 86%-95%, with a weighted average of 92%). The results for satisfaction with the taste and smell of water were 89% (n=395). The range for all combined companies was 81%-93% (with a weighted average of 87%). Data suggests Anglian Water customers' satisfaction with the taste and smell of water has been increasing over the past seven years.

The same research suggests similarly high rates of satisfaction among Hartlepool Water customers. Data for 2017/18 also indicates that 95% were satisfied with the colour and appearance of tap water (n=150). The range for all water-only companies was 88%-97% (with a weighted average of 91%). The results for satisfaction with the taste and smell of water among Hartlepool Water customers were particularly positive, at 93% (n=148). The range for all water-only companies was 79%-93% (with a weighted average of 86%).

In the online activities on water quality and social capital, customers were told about Anglian Water's plans to continue to improve the aesthetic quality of tap water. They were told that discolouration can be caused by iron sediments in the pipe network, but the level of iron which can be found in tap water is not harmful to health, and discoloured water is normally short-lived (it doesn't usually last more than 24 hours). They were told that Anglian Water has a maintenance programme that aims to keep the water mains free of iron sediment. Under this programme, the company investigates possible issues after receiving two calls from customers in a given area, and proactively communicates with customers if they think there may be a problem. They also provide further information on discolouration and tips for customers on how to deal with it on their website. Participants were informed that Anglian Water measures their performance in this area by the number of customers who contact them. The company's current performance is 13.8 contacts per 10,000 customers. By 2020, it expects performance to be around 11.7 contacts. Anglian Water proposes to maintain this level to 2025, as it would be costly to try to improve it further, and the company's performance is already ahead of the industry average (currently 15.5). Participants were reassured to hear that discoloured water is a cosmetic nuisance rather than a serious health issue, and that Anglian Water has a proactive maintenance programme in area. They generally bought-into maintaining current levels of this

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investment. Aiming to improve performance further didn't feel like the best use of resources. For some customers, even pursuing the 11.7 target felt unnecessary, as Anglian Water are already ahead of their peers. Customers felti t was very important for the company to proactively communicate the low risk attached to discolouration (using a variety of channels not just the website), so that call numbers are lowered. As investigating individual reports is costly, it felt sensible to customers to focus on improving existing infrastructure to minimise instances of discolouration happening in the first place.

The CCWater Water Matters research suggests that the vast majority of Anglian Water customers are satisfied with their water pressure. In 2017/18, 90% of customers said they were satisfied with this aspect of their service (n=399). The range for all combined companies was 81%-91% (with a weighted average of 87%). Results for Anglian Water indicate a rising trend in satisfaction with water pressure over the past seven years.

Data for 2017/18 from the same research indicates that 87% of Hartlepool Water customers were satisfied with the pressure of their water (n=150). The range for all water-only companies was 79%-91% (with a weighted average of 86%).

Most customers who took part in the dedicated discussion on **low pressure** on the online community had experienced this problem in some form. However, customers found it difficult to define exactly what low pressure is; they were not aware of any standardised measure, and felt perceptions of it may vary, depending on what customers were accustomed to. Temporary periods of low pressure were attributed to burst pipes or maintenance work. Most customers who had experienced **short-term low pressure** felt able to adapt their behaviour without this feeling too distressing. However, customers' perceptions of the problem were more negative if their day-to-day activities are affected – for example if it takes longer to shower, or if appliances fail as a result.

The online discussion revealed that those customers who **regularly experience low pressure** have had to learn to cope with it. Whilst some customers have just accepted the situation, others have changed their own behaviour (e.g. not running appliances or taps at the same time). Some customers have made more expensive investments to help address the problem in their own property. While installing new pumps was often seen as too expensive to justify, some customers have installed a new boiler or electric/power shower.

When presented with Anglian Water's plans in this area, **not all customers immediately bought-into the idea of the company investing to address all low pressure issues**. While approximately half of customers felt it is Anglian Water's responsibility to ensure water supply at a good pressure to all paying customers, around a third felt that the specific needs of each household affected by low pressure should be considered before Anglian Water decides to invest (as some customers may not feel unduly inconvenienced by this issue). A minority of customers felt it was homeowners' responsibility to check their water pressure and

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take appropriate action. (Note, this was not robust quantitative research that provides accurate insight into the distribution of views across the customer base).

Customers who took part in the online discussion on low pressure also felt the £7m proposed investment to tackle this issue felt high, considering the relatively small number of properties affected (£70K per property). Customers found it easier to accept the investment when this was presented as benefitting a group of properties, or an entire area, as this felt more in line with other improvements designed to enhance the network as a whole.

As a result, customers found it **difficult to accept an increase in their bill** to cover the cost of addressing low pressure. Some customers felt the costs should come from Anglian Water's existing budget. Others questioned whether those households affected by low pressure could be compensated (at lower overall cost than the proposed investment), or whether there might be cheaper alternatives, such as providing customers in affected areas with electric pumps. (Note, this was not robust pricing research).

Reflecting other research, the acceptability testing of the outline business plan, the **number of properties at risk of low pressure was the service area rated of lowest importance** from a list of six areas (receiving an average rating of 2.21 from household and 2.30 from non-household customers, on a scale from 1-6, where 6 is most important). Of the water measures in the plan, persistent low pressure was also ranked fairly low in importance. It was rated of high importance to 50% of household and 44% of non-household customers (where the highest ranked issue was water mains bursts of high importance to 82% of household and 81% of non-household customers).

Nevertheless, customers in the online community who took part in the consultation on Anglian Water's draft PR19 plan, generally reacted positively to the company's plans to reduce persistent low pressure. Customers were told that Anglian Water has improved its performance considerably in the past 15 years, reducing the number of properties on the low pressure register by 50% since 2005. They were also told that the company is proposing to ensure only 106 properties (0.49 properties per 10,000 connections) suffer from severe low pressure by 2025. Participants were pleased to hear about the improvements Anglian Water has already made in this area. A target of 106 felt quite low to participants, however some wanted more information on why an ever lower target can't be achieved.

In the acceptability testing on the outline PR19 plan, most customers felt the targets on persistent low pressure were sufficiently stretching. Of all household customers, 76% agreed. Customers of Hartlepool Water were significantly more likely than customers of Anglian Water to say the target in this area was sufficiently stretching. A much larger proportion of non-household customers felt the target was sufficiently stretching (92%).

Anglian Water has recently been trialling take up of a scheme to incentivise customers to replace **lead pipes** surrounding their properties, as part of the company's pipe replacement programme. The scheme offers customers a one-off

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contribution of £375 towards the cost of replacing the pipes that run from the boundary of their property to the point of entry to their home (the average cost of replacing a water pipe is £500-£1000). The scheme focused on three areas in Norwich (as five of Norwich's public water supply zones feature in the top 10 of 164 zones on the company's risk assessment, and customers there have been proactive in engaging on this issue in the past). One of the areas included social housing, while the others were more affluent (six hundred properties were targeted in total).

Customers in the affected areas were: invited to a drop in session (14 attended); provided with an initial letter about planned work a month before this started (including a lead leaflet and a leaflet about the incentivisation scheme); and provided with another letter (and another copy of the incentivisation leaflet) two days before work started. (These communications were hand-delivered to people's properties). In addition, any customer who requested a lead test was reminded of the incentivisation scheme (with a leaflet included in their results letter). At the end of the work, customers were also given a survey card to post back, which included information on the pipework observed at the boundary of their property.

Only three customers have taken up Anglian Water's incentivisation offer so far (as at September 2017); all from the more affluent areas in which the programme was run. Feedback provided to the Anglian Water staff lead on this programme suggests customers feel work is too expensive and will cause too much disruption (this feedback has not not been reviewed as part of this synthesis report).

Quotes from customers who took part in the online community suggest that there is some support for attempts to replace lead pipes, but customers also recognise that this is a large and expensive task. Quotes suggest some customers would like **more information** about targets and timescales in this area. Others would like more information about the support on offer to help customers to know if they have lead pipes and to access financial assistance to replace them.

On the Anglian Water bus (which visited different locations throughout the region as part of the company's PR19 engagement activities), one of the voting stations explored what **steps customers were prepared to take to protect water quality in their own home**. The top choice selected by the 1346 customers who took part was to carefully choose kitchen appliances (37%), followed by replacing lead pipes (34%), and always using a "water safe" plumber (29%). (Note, this was not robust quantitative research).

Recent quantitative evidence on customer reactions to the hardness/softness of their water suggests this is an aspect of the water service that generates markedly lower levels of customer satisfaction. Comparative data also suggest Anglian Water performs poorly in relation to some other water companies in this respect. The latest data from the CCWater Water Matters research (from 2017/18) found that just 57% of Anglian Water customers were satisfied with the

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hardness/softness of their water (n=385). The range for all combined companies was 45%-92% (with a weighted average of 69%).

The CCWater Water Matter research suggests comparatively higher satisfaction among Hartlepool Water customers. Data for 2017/18 indicates that 71% were satisfied with the hardness/softness of their water (n=148). The range for all water-only companies was 43%-91% (with a weighted average of 55%).

In this wave of research and engagement, Anglian Water has commissioned **two dedicated**, **qualitative**, **studies on water hardness/softness** to try to understand customer attitudes to and experiences of this issue in more detail. Both studies found that customers generally **preferred soft to hard water**, however hard water was also regarded as a **natural feature of the local area**. The two studies found slightly **different results** on whether customers wanted or expected Anglian Water to take action in this area.

The online community activities focused on water hardness found that the participants who were most aware of hard water had often moved from a soft water area, so the contrast was more evident. Participants generally preferred soft water to hard water, as it means that less money and time needs to be spent on removing limescale, less detergent and soap is required in cleaning and washing, household appliances suffer less corrosion and have a longer lifespan, and customers can drink from the tap without a filter. However, a minority of participants said they preferred hard water as they felt it has a better taste, they perceived the natural minerals to have health benefits, and they felt cleaner after bathing in it.

Overall, the online activities found that customers **generally accept water hardness as a feature of the local area** in which they live, confirming results from PR14 research. While a minority of participants felt sufficiently frustrated with their hard water that they wanted to do something about it, the research found that the **majority just accepted it and have got used to living with it**.

The research found that participants had implemented a **range of solutions** to help them to live with hard water. Small changes included: cleaning appliances regularly; using specialist de-scaling products; using stronger cleaning products; and using bottled water to drink. Larger changes included: using de-scalers; purchasing new washing machines/dishwashers; and replacing other household items regularly. Longer-term solutions included: installing water softeners and hiring plumbers to provide expert assistance.

The online activities found that most customers had **never considered whether the water company could do something about hard water** and what this might involve. The general **assumption was that there wouldn't be a viable solution** to this issue, as it would either be very expensive and involve an unnecessary cost being passed on to customers, or would rely heavily on chemicals (which was seen as something to avoid). Generally, hard water was seen as something that was **homeowners' responsibility to tackle**. However, participants were keen for Anglian Water to provide customers with **more advice and guidance** on living

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with hard water (e.g. tips on treating limescale and looking after appliances), which they suggested could be sent in information packs with the bill.

While most participants did not expect Anglian Water to make changes to how water is supplied, a minority with strong preferences for soft water were open to the company pursuing **solutions that would give them the choice to have softer water**. Suggestions included: partnering with soft water suppliers/installers to provide more cost-effective water softening installation; working with developers to offer water softening as part of new builds; and giving customers the option to pay more for soft water supply.

In a second dedicated piece of research on this topic, a group of customers were invited to a focus group in Colchester to discuss the issue of hard water. Discussions revealed that these customers were also very aware of having hard water; participants reported that this was a **common topic of conversation in the local area**. In contrast to the online community activities on this topic (where a minority of people said they preferred hard water), **focus group participants did not see the benefits of hard water.** There was no spontaneous association of hard water with health benefits. However, most customers did not feel hard water was bad for them either. **Most customer concerns related to the taste of hard water**, rather than its impact on health. Customers also referenced the effect it has on household appliances.

Overall, participants highlighted four main areas or contexts in which hard water was an issue for them: in showering (mentioned first by most members of the group); damage to white goods (although most members of the group had not experienced this themselves); drinking tea or beer (when hard water was felt to affect the taste); and in drinking tap water itself (everyone noticed the taste, which was thought to vary from place to place within the Colchester area). The researchers also found that when participants at the focus group got into the subject of hard water, discussions quickly escalated into questions of "contamination". Discussing this issue prompted some members of the group to share scare stories about "what else was in the water".

As was the case in the online activities, the focus group revealed that **customers** had found their own ways of dealing with hard water, including purifying it, investing in softening devices, and drinking only bottled water (two of the eight participants in the group didn't drink tap water because of concerns about its quality).

Although participants had strong opinions on the topic, as was the case in the online activities most accepted that hard water was simply a feature of the local water environment. However, in apparent contrast to customers who took part in the online activities, a majority of (the eight) focus group participants said they would be prepared to pay more for softer water, and were also prepared for others to pay more for this. More customers also felt it was worth investing in new technology to solve this problem than thought it was not worth doing so. That said, when asked if they would move to another area if it ensured they had softer water, most customers said they would not.

Relevant To Business Portfolio	Topic Area & Customer Evidence
	Analysis of social and digital media content mentioning Anglian Water for the period 1 st February 2017-31 st January 2018 found that high bills featured in 260 conversations during this time, with a potential reach of 28K people. Sixteen percent of these conversations referenced water meters, driven by speculation that metered customers subsidise usage in other, more expensive regions, and that living in a hard water area leads to more expensive bills.
Raw water	Catchment management
resources, Raw water distribution, Water treatment, Water distribution	What we already know (as at June 2016)
	Respondents to the consultation, in particular, found catchment management quite difficult to understand ; this is an area where some customers and stakeholders feel more information and/or public dialogue may be needed.
	Among people taking part in engagement activities there is some support for the general principle of prevention (as better than cure). However, opinion is divided about whether catchment management is a sound approach . Even those who support it tend to express some reservations (about the strength of the evidence base, the likelihood of it being successful, and the potential costs and impact on customer bills).
	Among those taking part in engagement activities on this topic, opinion is divided about whether Anglian Water has a leading role to play in catchment management; many people feel there is also a role for Government, statutory agencies, supermarkets and farmers (working in partnership with the company).
	Evidence from engagement activities reveals a range of concerns about paying farmers to change their behaviour (including a view that this is not fair, is not likely to influence practice, and may have unintended consequences).
	Household and business customers who responded to the Second Stage Environment (Stated Preference) survey did not rank the question of encouraging lower use of pesticides in farming very highly (from a list of named environmental priorities).
	Some participants in the consultation, and stakeholders attending the Joint Panel Meeting, were keen for the company to continue to lobby the UK Government to get harmful chemicals banned.
	What's emerging (Autumn 2016 onwards)
	Quotes from participants who took part in the main online community trial suggest customers are supportive of attempts to protect water quality at source . Some customers would like to see more information from Anglian Water about how the company intends to do this in practice, including targets and timescales. Quotes suggest that customers feel it is important for farmers to reduce the use of chemicals on their land. However some customers question the influence that Anglian Water can exert over farmers' behaviour , and feel an enforcement mechanism may be required.

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In the online community activities specifically focused on catchment management, a **majority of participants spontaneously mentioned farming** in the context of discussions about what goes into the water supply. Chemicals from pesticides, herbicides, and fungicides were top of mind when participants thought about how agriculture impacts on the water supply. The spontaneous view was that these chemicals were **harmful to human health**, either directly or indirectly, via the ecosystem or the food chain.

However, the online activities found that **views about pesticides**, **and the farmers who use them**, **varied**. Some participants felt that farmers were under considerable pressure from supermarkets and wholesale buyers to ensure sufficient yields while keeping costs down, and so viewed pesticides as a **"necessary evil"**. Others felt that farmers have too much freedom and regarded pesticide use as a **"choice" that results from insufficient Government control** over farming and lack of initiatives to promote more environmentally-friendly alternatives.

Perhaps somewhat at odds with other research, the online activities on catchment management found that participants tended to focus spontaneously on processing and treatment, rather than prevention. However, they identified solutions at all stages of the water cycle. These included: Anglian Water getting involved in research and innovation (e.g. developing drainage that filters or reduces run-off, having separate supply and/or sewerage for farming, and dilution); education of farmers; cash incentives for farmers; lobbying Government and banning certain chemicals; investing more in testing and treatment; and fining farmers for continued use of certain chemicals. Overall, the research found that participants bought into the idea that, as a country, the UK should be reducing chemical use in crop production.

The research found that many participants were supportive of the idea of incentivising farmers. Forty eight percent of (the 90) participants who took part opted for this as their primary solution to the problem, while 27% advocated further treatment, and 25% proposed another solution. The research found that customers from the "careful budgeter" segment were particularly keen on treatment, and (together with participants from the "family first" segment) were less keen on incentivising farmers. (However, note this was not robust quantitative research).

Those participants who supported incentivising farmers did so as they felt this represented a **step towards a more natural way of producing food** that impacts less on the environment, "prevention is better than cure", and farmers were unlikely to change their behaviour without clear incentives. Those participants who supported further investment in treatment were motivated by a view that **pesticides are a reliable and secure means of meeting demand**, and that changing farmers' behaviour would be difficult. Those customers who supported another option tended to emphasise that it was the **Government's job to promote behaviour change** amongst farmers, rather than a role for the water company (although they were keen for Anglian Water to lobby and advise Government on

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this topic). Some participants were also unhappy about what they perceived to be a shift from the principle of the "polluter pays" to the "polluter being paid".

The online activities found that **learning about Anglian Water's strategy**, and the costs of treatment, helped to shift the views of those who previously felt that treatment was the best option. Hearing about a 21% increase in treatment costs led many of these participants to accept a more collaborative approach. Hearing about uptake by farmers of the Slug it Out initiative, and the success in reducing metaldehyde, also helped convince them that some farmers were prepared to change their behaviour.

Overall, and on reflection, participants generally felt that **incentivisation was the best solution** (as it tackles the problem at source, has less of an economic impact on the industry, and has a lower impact on customer bills). However, participants expected this to be part of a **multi-pronged approach** to the problem, that also involved Anglian Water lobbying Government to secure longer-term change. For many, the **ultimate aim is a complete shift away from chemical use.** (In this light, some participants expressed **concerns about the potential long-term use of phosphorus as a substitute product**). Participants were wary of the strategy of paying farmers escalating into a long-term solution that falls more on Anglian Water (and its customers) than on Government.

The University of East Anglia study combining Anglian Water customers' subjective preferences with their willingness to pay for river water improvements also sheds light on these issues. The "Q analysis" carried out in the study found that most respondents prefer conservation to be incorporated within decision-making. They support the idea that major polluters should be doing more to reduce pollution. Most respondents also reported feeling poorly informed on the subject of river water quality however, typically, they were neutral about receiving more information. Given the widespread distrust of water authorities (e.g. the Environment Agency) revealed in the study, the researchers suggest it may be that respondents don't place too much importance on receiving information from sources they are sceptical about.

Beyond these points of consensus, however, the study appears to confirm that customers have a **range of views about how best to tackle pollution**. The analysis revealed **five statistically distinct viewpoints** that represent shared perpectives on issues about water quality.

For those respondents who share **viewpoint 1**, "**ethical and ecological concerns are paramount**". These respondents feel that **clean rivers are an asset** – a rich and valuable environment in which species can flourish and one that humans can use and enjoy for recreation, (but not as an economic resource from which to derive profit). This group displays a **high degree of intergenerational regard**; they believe that rivers should be protected for our children and our children's children to enjoy. The group believes that river water quality is a very **serious issue**, and not enough is currently being done to protect and improve riverine environments. They believe the **polluter must consider conservation ahead of financial goals or profit**. They feel that the **agricultural sector should be regulated** so that land is better managed and pollution is

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prevented. Respondents in this group are willing to pay higher prices for food and water to support remediation efforts, providing improvements occur. However, they also express the highest degree of **pessimism** that such measures will take place in practice. The research found that this group of respondents are **predominantly male**, have the oldest average age (57), are the most likely to have a **graduate level education**, and tend to be **relatively prosperous**.

Those respondents who share viewpoint 2 subscribe to "financial controls on pollution reduction for major polluters". These respondents also have a deep concern for the wellbeing of the ecological environment, and feel that river pollution is something that major polluters should be tackling. They feel that controls on agriculture and financial penalties on polluting water companies are key methods by which remediation should be achieved. They strongly believe that the pollution reduction strategies implemented by major polluters should not be financially incentivised. However, despite approving of financial controls, they strongly disagree with increased legislative controls, relative to other respondents. This group distrusts the water authorities and are unwilling to contribute to remediation efforts themselves via higher food or water prices. The research found that the highest number of respondents fell into this group. Respondents in this group have the lowest mean income, the lowest proportion of members with a graduate education, the lowest membership of environmental organisations, and took the lowest mean number of river trips in the year preceding the study. The mean age was 41.

Viewpoint 3 is summarised as support for "hierarchical, government-driven leadership to protect river ecology". Key to this viewpoint is agreement with the statement "strong effective leaders are needed to help reduce river pollution". Respondents sharing this viewpoint support government intervention to penalise water companies that pollute and regulate the agricultural sector. As well as increased legislation, they advocate use of accurate information and the best possible equipment to reduce pollution. Perhaps as they use rivers less than average, river water quality for recreational use is less important to these respondents; instead their concern is with the ecological health of rivers. These respondents are more likely to be female (60%), and the proportion with a graduate education is well above the study mean. The average age (44) was close to the sample mean.

Those respondents that share viewpoint 4 support "pragmatic use of the environment and collaboration between polluters". These respondents have the highest levels of distrust of authorities. They don't believe that strong leaders are necessary; instead they feel polluters should collaborate with each other and seek out local solutions to pollution problems. Although these respondents support regulation of agriculture and financial penalities for water companies if pollution persists, they are also open to incentives to encourage polluters to make their practices more environmentally friendly. They are also willing to pay more on their water bills to ensure improvements. These respondents are somewhat utilitarian in their views; they regard rivers as an asset to be used, and are less concerned about intergenerational equity

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compared with other respondents. This group believe rivers should be clean enough to protect human and other life, despite not wishing to use rivers more frequently themselves. However, they are markedly less concerned than other respondent groups about species loss. These respondents are **more likely to be male**, and **mean income is slightly lower than the study average**. The average age was 39.

Viewpoint 5 is characterised as support for "libertarian pollution control via legislation and monitoring". For respondents in this group legislation, backed up by accurate data, is the preferred method of pollution control. Relative to the majority of respondents, this group does not believe river water quality problems are a serious issue. However, the group does feel it is wrong for polluters to profit while pollution still occurs, and it thinks major polluters should be doing more to control pollution. These respondents are generally more supportive of farmers than other respondents; they are less willing to see farmers penalised for livestock pollution and are less willing for them to be heavily regulated. Similarly, compared to other respondents, they are less likely to support financial penalties for poorly performing water companies. In terms of the action they are prepared to take themselves, these respondents are less willing to pay more on their water bills to improve water quality, but they are more willing to pay higher food prices to support farmers' pollution reduction efforts. Although this group distrusts authorities more than most respondents, they feel better informed on river pollution issues. This group includes the smallest number of respondents. The mean age of respondents (33) is the lowest of the five groups, and the **mean income is the highest**. The group has the **highest** proportion of respondents who are members of environmental organisations. These respondents also visited rivers more than any other group in the year prior to the study, and felt that having clean rivers that can be used for recreational activity was important. This group was the most optimistic about the future of river water quality.

The authors of this report had hypothesised that expert respondents may share similar attitudes and psychological strategies. However, the sub-sample analysis revealed that this was not the case. In fact, there was actually **greater diversity within the experts' viewpoints**, **compared to other types of respondents**. The analysis of experts' viewpoints also produced the fewest number of respondents who were confounded across the five factors, suggesting that the experts hold distinct and well-formed (although divergent) opinions on river management.

(See A Flourishing Environment, Environmental issues and priorities for more details on this study).

Anglian Water tested the results of the Q-Analysis research with a group of participants from the online community to see if there were any associations between different types of customer (by segement, age and gender) and the five groups revealed in the UEA study. Overall, this research does seem to confirm many of the UEA findings about the different types of customers who tend to share each of the five viewpoints. (Findings on the groups that tend to reject each

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viewpoint seem less in tune with the UEA findings, although the UEA researchers did not set out their data in this way so it is harder to make comparisons).

Overall, of the 41 participants who took part in the online activities, the largest number of people preferred option two, "financial controls on major polluters to achieve pollution reduction", the viewpoint that also had the highest number of respondents in the UEA study. The next most popular choice was option one "ethical and ecological concerns are paramount". The other options garnered similar, but lower levels of support. The most unpopular choice was option five, "pollution control via legislation and monitoring", with the other options rejected by a similar, but smaller number of people. Again, this viewpoint also had the fewest number of respondents in the UEA study.

The facilitators of the online community identified some subtle differences between the genders. Women were less willing to pay for remediation (option one "ethical and ecological concerns are paramount"), a finding that was also found in the UEA research (where 87% of those sharing this viewpoint were male). The online activities also found that women felt more strongly than men that the onus should be on major polluters to pay (option two "financial controls on major polluters to achieve pollution reduction"). This finding does not appear to be strongly supported in the UEA study (where just 54% of those sharing this viewpoint were female). The online activities found that women more strongly rejected viewpoint three ("hierarchical government-driven leadership to protect river ecology"). However, in the UEA study, the researchers found those sharing this viewpoint were more likely to be female (60%). The online activities found that men more strongly rejected viewpoint four ("pragmatic use of the environment and collaboration between polluters"). However the UEA study found that those sharing this view were marginally more likely to be male (56%).

The online activities found that **age associations generally followed the pattern for opinion as a whole**, but with a few outliers in the youngest and oldest groups. The research found that the **older group (65+) leaned towards a halt in commercial use of water bodies** to protect them (view point one, "ethical and ecological concerns are paramount"), which again appears to confirm results from the UEA study. The online community activities found that younger customers (18-34) were more likely to reject viewpoints three and five ("hierarchical government-driven leadership to protect river ecology" and "pollution control via legislation and monitoring") suggesting a distrust of government initiatives and legislation. However the UEA study found that younger people were more likely to support viewpoint five.

The UEA study did not explore associations between Anglian Water's customer segments and the viewpoints revealed in the Q-Analysis, but recommended this as a follow-on piece of research. The online activities found that "protective provincials" appeared more open to controlled exploitation of water (viewpoint four "pragmatic use of the environment and collaboration between polluters"). Customers in the "family first" segment were more likely to reject the first viewpoint ("ethical and ecological concerns are paramount"), because

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of the reference to not exploiting water bodies which, with an increasing population, they felt was unrealistic. The authors observed that "careful budgeters" appeared to reject government intervention, as they did not believe in its capabilities.

Further, more robust, quantitative research, involving larger samples may be required to provide more conclusive evidence on associations between the five viewpoints and different types of customer.

As highlighted above, in the **consultation on the draft PR19 plan** with customers from the online community, participants were introduced to Anglian Water's plans to achieve zero failures to comply with water quality performance measures. Participants felt that this was the right priority. Maintaining water quality was felt to be an **essential ambition for the company** to have. Plans to achieve the target by **working closely with farmers, businesses, and stakeholders** were also received positively as a **more proactive approach than focusing on treatment alone**. However, a minority of participants **questioned whether the company can rely on farmers** to change their behaviour, and therefore if the target might be too ambitious. Participants were also keen to see a clearer link between the plan and some of Anglian Water's current, successful, initiatives, such as Slug it Out.

All

Resilience

General views about resilience

What we already know (as at June 2016)

Evidence from multiple qualitative and quantitative sources suggests customers and stakeholders have some awareness of increasing **pressures on the water system** and the specific vulnerability of the region from drought and climate change. Those people who took part in qualitative research and engagement activities demonstrated a particular awareness of and concern about issues relating to population growth/development, as well as changes in the weather. However, people also emphasised other potential risks and hazards, e.g. relating to theft, terrorism, and civil unrest.

Across multiple qualitative research and engagement activities, customers and stakeholders express general support for **preventative action** and **long-term planning** to build resilience. Participants are also supportive of the company **working in partnership**, and **learning from other regions** and countries in tackling these issues.

What's emerging (Autumn 2016 onwards)

Exploring customer views on the topic of resilience has been a major focus in this wave of research and engagement activity.

The customer world focus groups identified that, for many customers, **imagining** the future is a difficult and sometimes worrying task. The pressures of everyday life mean many customers are focused on getting through the next few

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weeks or months. For some customers, social media is acting as a constant distraction, freezing their attention in the present. The focus group leaders concluded that Anglian Water needed to find ways to show how planning for the future will make things better for customers today.

Some customers at the co-creation events were **surprised to find out that water** is **not an infinite resource**; they believed that the water cycle means water cannot run out. The leaders of the co-creation events suggest some customers found this realisation frightening, though it also helped to make climate change issues more relatable. Many customers at the focus groups also had **little understanding that their own water supply was at risk**. For these customers, scarcity was a problem they associated with other countries, rather than the UK. The online community research that specifically focused on drought resilience confirmed that droughts were associated with "dry countries", and that most customers had not previously considered how likely they were to experience a drought.

Evidence from the customer world focus groups, the online community trial, and one of the future customer workshops suggests that the **term "resilience" was not well understood** and does not resonate with participants. The focus groups highlighted that customers tended to prefer simpler terms such as "long-term planning".

Those involved in the strategy development process and the leaders of the cocreation workshops found that it was initially **difficult to engage customers on the topic of resilience**. The strategy development process found that it was especially difficult to engage customers in debates about complex trade-offs. However, in both activities, once workshop leaders had spent more time exploring the topic, customers became much more interested and engaged.

Results from the main online community trial, and the online community activities on drought resilience, confirm that customers are "awakened" to resilience challenges once they are explained to them. When asked to rank Anglian Water's four ambitions in the main trial, "making the East of England resilient from drought and flooding" was voted top priority by two thirds of customers. These issues were seen as likely to affect everyone in the region on a personal level. Tackling resilience was regarded as Anglian Water's core remit. Mitigating drought and flooding was felt to be especially important in light of pressures on infrastructure associated with the long-term growth agenda.

Similarly, in the acceptability research on the Strategic Direction Statement, there was **least support for excluding resilience** from the four long-term goals among the 8% of customers who felt one of the goals should be excluded. However, in the same research, of the 10 customer outcomes, resilience was rated lower (5th) in order of importance (seen as important by 86% of customers). Planning for the future, however, was ranked 2nd of six key challenges facing the company, seen as important by 86% of customers. (The highest ranking challenge was voted as important by 89%, and least important by 52%).

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When (five of) Anglian Water's retail customers were asked to prioritise between the company's four long-term ambitions, some assigned equal priority to several of the ambitions. However overall, "make the East of England resilient to the risk of drought and flooding" was ranked first, just ahead of "enabling sustainable economic and housing growth", and "working with others to achieve significant improvement in ecological quality across our catchments". Reflecting other research, "becoming a carbon-neutral business by 2050" was ranked last.

In numerous strands of research and engagement, it is clear that **some customers remain sceptical about climate change**. This was evident, for example, in the customer world focus groups and the co-creation events, where some customers either expressed doubts about whether climate change was happening, or did not regard it as a pressing issue. Even those who accepted the case for climate change struggled to see what they could do about it. Nevertheless, the customer world focus groups, and other strands of activity, revealed that customers are often very concerned about some of the problems that can flow from climate change, such as flooding, especially if these are framed in such a way that customers can understand the potential impact on their own lives.

At the same time, it is also clear from research and engagement that some customers are **very concerned about climate change**. For example, some of the participants at the future customer workshops expressed considerable concern about climate change, which they viewed as a very "real" issue that needed to be taken seriously. At one of the future customer workshops, participants were asked what they thought might be the impact of climate change on the region. They mentioned issues including: drought; coastal erosion; flooding; death of animals; and threats to human health (although they also highlighted the possibility of better Summers). Students felt that Anglian Water should take a range of action to deal with these issues, including: limiting water use; installing more wells and reservoirs; limiting emissions; investing in alternative energy; and doing more to conserve water. Students at this workshop also questioned why they didn't know very much about the impacts of climate change on the UK. They highlighted that their **coursework on climate change relates only to other countries.**

Even if they are convinced that climate change is happening, several pieces of research and engagement activity suggest customers think its impacts are **extremely uncertain**. Some evidence, for example the online activities on water resource management, suggests that in this context it is important to customers to take significant action now to "future proof" the water system. However, other research suggests customers want to take a more cautious approach that takes current costs more centrally into account. (See Investment in Resilience section for more details).

The online community activities specifically focused on drought resilience revealed that not all customers realised Anglian Water plans 25 years or more ahead to tackle resilience threats and balance supply and demand. Knowing this increased perceptions of it as a proactive and forward-thinking company. However it also meant that customers placed more trust in and responsibility on the

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company to maintain the water supply in the event of a drought, as they had now been forewarned.

The co-creation events and online community trial suggest that some customers are **keen to know more about what Anglian Water are doing to enhance resilience**, if new ways can be found to engage them appropriately. Customers involved in the online community were particularly interested to hear more about the technological advancements that might help boost resilience and the changes that might be required to homes to make them more sustainable in future. However customers taking part in the co-creation events and online community were also clear that in discussing potentially alarming issues the company needs to **be clear about what they are already doing** to deal with the issues (as the experts).

Other recent research suggests some customers would like the company to just "get on with it" and would not welcome greater responsibility for making decisions about these issues. The strategy development process identified that in areas of trust, Anglian Water should ask for a high level steer from customers that will allow the company to take the "tough decisions". For complex trade-offs, it will be important to use high engagement techniques to help customers to learn about the issues.

The online community activities on water resource management took place in the Spring of 2018, with a group of customers who by this time had acquired a good deal of insight into water resource management issues. Even so, in the wider context of people's lives, it was clear that these are **not priority issues for most customers** (especially those with younger families). Although customers understood that water is a scarce resource in the region, the lower rainfall was also something many said they enjoyed. The research found that customers in the "comfortable and caring" segment and older customers (who remembered the effects of previous droughts) were more sensitive to the need to be cautious with the supply.

Raw water resources

Supply interruptions (less than four days)

What we already know (as at June 2016)

In the Willingness to Pay Main Study focus groups, both interruptions to supply (an area specifically prompted) and reliability of supply (mentioned spontaneously) were **considered important issues** for household customers. Shorter interruptions, such as those **lasting three to four hours**, were regarded as manageable, as people could take contingency action, but the study suggested that anything longer would cause some concern. People were **more tolerant of interruptions to supply that were outside of Anglian Water's control** (e.g. those caused by a freak weather incident or natual disaster).

Anglian Water's Business Unit Report 2012-2013 found that the **most common complaints received by the water service** related to unplanned interruptions to supply (119 YTD), followed by leakage (105 YTD). However, by 2015-16, the most common complaints related to leakage (73 YTD), followed by water pressure (67 YTD).

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Among respondents to the PR14 Willingness to Pay survey, 40% of household customers and 44% of non household customers had experienced no problems (of any kind) with the service in the past five years. However, the most common problems for both types of customer included notified interruptions to supply, and, for household customers unexpected interruptions to supply (along with issues relating to the aesthetic quality of water, leaks, and, for businesses, billing related issues).

Nevertheless, between 2011 and 2014, organisational performance data indicates that Anglian Water **met its supply interruption targets**. When it comes to the number of hours lost due to water supply interruptions in 2013-14, the data indicates that Anglian Water was slightly above the industry average (0.33 compared with 0.24), while Hartlepool was below the average (0.11).

Evidence from several qualitative research and engagement activities suggests household customers appreciate the way in which Anglian Water lets customers know about planned interruptions, and deals with emergencies.

What's emerging (Autumn 2016 onwards)

The analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that **floods and outages had driven negative sentiment about the company**. An outage in Milton Keynes in July and flooding in parts of the East of England in August made these two months the most negative for Anglian Water during the period under review.

The importance of interruptions was confirmed in conversations between Anglian Water and five of their retail customers, who were asked which aspects of Anglian Water's service (linked to their assets) they felt were most important. In addition to cost, consistent supply/no interruptions, was mentioned by three of the five retailers. (Other issues mentioned were: metering; data accuracy in terms of Anglian Water's products; simple tariffs; resilience; water quality; and water pressure.)

Despite these findings, the leaders of the co-creation workshops concluded that, for the most part, customers were **more concerned about "long-term decline" than "short-term" interruptions to supply** (however the workshops did not include a detailed discussion of drought or severe restrictions). The workshop leaders found that the notion of "decline" has salience with customers and feels especially negative.

In the acceptability research on the outline business plan, supply interruptions emerged as an issue of **middling importance** of the water measures tested. Fifty-seven percent of all household customers rated it as an issue of high importance to them (mains bursts was ranked top on 82% and AIM bottom on 36%). Reflecting other research, **Anglian Water customers were significantly more likely than Hartlepool Water customers to say that interruptions were of high importance**. Fifty percent of non-household customers said that interruptions were of high importance to them (mains bursts was ranked top on

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81% and per capita consumption, single supply, and low pressure were all on 44%).

Robust quantitative data on interruptions suggests that they are **one of** the more commonly experienced problems with the water service, (especially unplanned interruptions), for both types of customer. However, household satisfaction with performance on unplanned interruptions is relatively high, and most household customers support maintaining rather than improving current service levels. Satisfaction is lower for non-household customers, and improvement is more important to these customers. However, research suggests both types of customers are willing to pay to improve current service levels.

As highlighted above, the Willingness to Pay survey found that the majority of household customers have not experienced any problems with their water or sewerage services in the last five years (72%). For those that had, an issue with the water supply was the most commonly experienced problem (15%). Just 8% of household customers had experienced a problem with their sewerage services in the same period (n=1353, all subsamples, DCE and DWS surveys). A smaller proportion of non-household customers had experienced no problems with their service in the past five years (55%). In contrast to household customers, problems with the sewerage service (14%) were as common as those with the water service (15% n=500, all subsamples, DCE survey).

A total of 220 household respondents reported experiencing a problem with their water service. Of these, the most commonly cited problem was a concern about the aesthetic quality of tap water (taste, smell or appearance) or hardness (53% or 116 respondents). This was followed by one-off low pressure incidents (33%, 72 respondents), and a supply interruption without prior warning (32%, 71 respondents). Twenty five percent of these respondents had experienced an interruption with prior warning (Combined and water only subsamples, DCE and BWS surveys).

For the 81 non-household customers who had experienced a problem with their water service, concerns about the aesthetics of water were also the most common issue (75%, 61 respondents), followed by occasional low pressure (37%), and planned (35%) and unplanned (33%) interruptions.

In the (DCE) Willingness to Pay survey, 76% of household customers said they were found performance on unplanned interruptions to be either satisfactory or somewhat satisfactory (the percentage for leakage was 75%, rota cuts was 78%, and discolouration was 79%, n=550, combined and water only subsamples). In the BWS version of the survey, household customers were asked about the aspect of current performance/service they considered the best and the worse. In relation to water services, unplanned interruptions were considered best by the second highest proportion of respondents (30%) after rota cuts (36%, n=304, combined sample, BWS survey).

The majority of non-household customers also rated performance for unplanned interruptions as satisfactory (58%), although satisfaction was

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markedly lower for non-household than for household customers (n=253, combined and water only subsamples).

The latest data from the CCWater Water Matters research (from 2017/18) found that the vast **majority of customers are satisfied with the reliability of their water supply.** The data shows that 98% of Anglian Water customers were satisfied with this aspect of their service (n=397). The range for all combined companies was 94%-99% (with a weighted average of 97%). Over the same period, 97% of Hartlepool Water customers said they were satisfied with the reliability of their water supply (n=149.) The range for all water-only companies was 95%-99% (with a weighted average of 97%).

In the Willingness to Pay survey, most household respondents opted to maintain current performance levels for water services (between 60%-72% depending on the attribute). For those that indicated that service levels should improve, the priority was reducing leakage (32%), with low levels of support for improvements to unplanned interruptions (19%) as well as discolouration (23%) and rota cuts (17%, n=550, combined and water only subsamples, DCE). Non-household customers also viewed leakage as the priority for improvement in relation to water services, with 42% opting to improve performance and just 41% opting to maintain it. However, unplanned interruptions were rated higher (30%) than discolouration (23%) and rota cuts (21%) as an improvement priority, n=253, combined and water only subsamples).

In selecting a package of improvements relating to the water service, the Willingness to Pay (DCE) choice task indicates that household customers gave the greatest weight to leakage (26%) and change in the bill (24%). Unplanned interruptions accounted for 19%, discolouration for 16%, and rota cuts 15%. (N=551). Non-household customers placed the greatest weight on leakage (29%) and also on severe water restrictions (22%), with less weight given to change in the bill (19%). Unplanned interruptions was ranked joint last with discolouration (both 15%). (N=253).

The Water Resources survey "package" exercise confirmed that supply interruptions were one of the most recently experienced service problems for household customers (13% had experienced this in the past year, while 21% had experienced low pressure and 2% had received a boil notice). It was also a common problem overall, with 50% having experienced an interruption at some point in the past (the highest percentages were for hosepipe bans at 57% and low pressure at 51%). Supply interruptions were also one of the most recently experienced problems for non-household customers (14% had experienced this in the past year, compared to 18% for low pressure and 6% for hosepipe bans, boil notices and sewer flooding). It was also the most commonly experienced problem overall for these customers, with 63% experiencing this at some point in the past (followed closely by low pressure at 59%).

In the same survey, after tackling the aesthetic quality of tap water and leakage, household customers allocated one of the greatest percentages of the bill

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increase to interruptions. After leakage, non-household customers also allocated a large percentage to interruptions (or security of supply, depending on the version of the survey).

The customer world focus groups found that **disruption is where the company** "becomes a hero or a villain", depending on how incidents are dealt with. Severe disruption leads people to blame the company (questioning the infrastructure and the capability of the company to maintain it). The groups also found evidence of "confirmation bias" (customers who have had a bad experience were more likely to have heard of others in a similar situation). However, discussions revealed that if problems are tackled quickly, and customers are compensated, the story becomes a positive one.

The analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that repairs were a particularly contentious topic, generating 644 conversations (with a potential reach of 157K customers) driven by customers tweeting frustrations about faults. Slow restoration time led to the most complaints, with around 7% of mentions specifically requesting updates. The authors concluded that linking more frequently to the "in your area" map of on-going service interruptions could help remedy this.

In this wave of research and engagement, Anglian Water has commissioned **two pieces of qualitative research with customers who have recently experienced an outage,** to try to understand their experiences and perpsectives in more detail. These found slightly different levels of satisfaction with Anglian Water's response, but highlighted fairly similar issues about what customers would like the company to do in future to support people in this situation.

Customers who took part in the **Horncastle co-creation event** (who had experienced a recent outage) said they were **very satisfied with Anglian Water's response to the incident.** They were particularly impressed with: text updates and proactive phone calls from the company; the amount of bottled water available to them; and the respectful way in which they were treated by Anglian Water staff.

Those customers who were less positive felt that: Anglian Water had not acknowledged the consequences of the outage for livestock and livelihoods (as they had focused instead on the threat to human health and lives); communication had not always reached more isolated communities and smaller villages; and the website had insufficient up to date information (in contrast to a good response on the phone and via social media).

In **thinking about possible future disruptions**, farmers in particular were keen to develop some community-based emergency solutions. Some customers also said they would be willing to share more of their personal details with Anglian Water if they knew it would help the company to provide a more bespoke response.

A second piece of research on interruptions targeted **customers in Daventry**, who had experienced an outage in the run up to Christmas (23rd-24th December). This focus group (with seven customers) found that, for the most part, the incident was **viewed simply as an "inconvenience"**. Customers were generally resilient

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to the interruption, demonstrating a "get on with it mentality". Most felt the timing of the incident didn't matter too much, as the supply came back on in time for Christmas day. Participants also generally understood that the issue wasn't Anglian Water's fault, had empathy for the engineers who had to work over Christmas, and were appreciative of their work.

Participants' main criticism of Anglian Water concerned poor communication. Discussions highlighted that the worst thing for customers was not knowing how long they would be without water, as this made it more difficult to deploy coping strategies and plan around the incident. None of the participants had received a call to say the water was off, and only two of the seven had received a call to say it was back on. In addition, only a few customers had received the £20 credit, or knew about this (although they appreciated the gesture), and very few were aware of the priority register for vulnerable customers.

Moreover, participants were **not clear how they should be accessing updates from Anglian Water during an incident**. The majority wanted to call the company directly, but were frustrated with the number of steps involved in getting through to the incident helpline. One person was frustrated to have signed up to the text alert service to find that texts redirected them to another website where they were required to log in, which they felt wasted their time. The research found that customers had different preferences for communication in an incident. Older customers wanted to speak to someone on the phone, while younger customers were happy with an automated phone service to save time. While some customers felt that local Facebook groups and local news were effective ways for the company to communicate what customers should do in an emergency, around half felt the bill was a key channel for this information.

In future, participants in the Daventry focus group wanted **more effective communication across the whole duration of an outage**, including: on/off alerts; timely information on expected duration (to prevent people from panic-buying water); a clear contingency plan (including the steps the company is taking to resolve the situation and where customers can get support); a clear point of contact at Anglian Water and staff on the ground to provide information (in particular to the vulnerable); and frequent updates to reassure customers that the job is being taken care of.

In the Daventry focus group customers agreed that **48 hours was the maximum amount of time they were willing to go without water**; anything beyond this was viewed as "serious". Participants also acknowledged that the acceptable time limit might be **shorter for some customers**, such as those with young children.

Anglian Water commissioned a dedicated discussion on the online community on **long-duration interruptions**, to explore customer attitudes to duration in more detail, and to explore potential solutions to these types of interruptions.

The research found that, generally, acceptable water cut-off time well exceeded three hours. Just a handful of customers said they couldn't be without water at all, or would only last for a few hours (0-4 hours). These included households with young children, someone with a disability, or customers who

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had particular needs for water during certain times of day. The research also found that most customers could manage with an interruption that lasted 12 or even 24 hours, though communication with Anglian Water, and access to bottled water stations, become more important. Some customers felt they could last for days (72+ hours) without water as they live alone, are retired, or have access to their own (emergency) water supplies (e.g. water butts, or bottled water stocks).

Despite these general findings, customers felt that interruptions at **certain times** of day or particular days of the week might have a greater impact. They pointed out that weekdays before 9am and after 5pm are peak times for water use and it would be difficult to imagine having no water during these times, however a short-notice warning and access to bottled water would make it easier to plan ahead and manage. If interruptions happened at weekends, customers thought more people were likely to be at home, and so be potentially affected, but they would also have more flexibility to work around an interruption.

Most customers were immediately concerned about certain customer groups and how they would manage with a disrupted service – including the **elderly, those with disabilities, and families with young children**, as well as local businesses that might be impacted financially.

Echoing findings from the Horncastle co-creation event and Daventry focus group, customers emphasised the importance of Anglian Water **communicating all the relevant details** about an interruption to affected customers, using a **range of channels** (including courtesy calls, local media, social media, website and email), with **text messaging being key**. Participants felt that prompt communication was essential in reassuring customers that **Anglian Water has the situation under control**.

Customers suggested a range of solutions to deal with interruptions. For interruptions lasting **0-4 hours**, customers felt it was important to **supply bottled water to the vulnerable**, although they felt most other customers might be able to cope. For interruptions lasting between **12-24 hours**, most customers felt **bottled water would suffice** for the necessities of everyday life. However, some customers started to suggest the need for tankers. For interruptions lasting **beyond 72 hours**, **more customers mentioned tankers and standpipes**. They also highlighted alternative solutions, such as negotiated gym access for personal hygiene purposes.

In general, tankers were seen as a good solution for interruptions lasting more than 12-24 hours or during peak-use hours and were perceived as more environmentally-friendly than bottled water. Customers highlighted that, ideally, these would be connected to the mains, as filling up with buckets was considered more hassle than help. However, some customers raised concerns about the impact of tankers on noise and traffic flow, how Anglian Water would ensure equity in provision between homes, and the household activities that may have to be paused during this time.

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Despite some support for tankers in these circumstances, uncertainty about how often long-duration interruptions occur, and therefore the likely need for more tankers, resulted in a general lack of support among customers for bill increases to fund this solution.

When considering the trade-off between a quick fix (tankers) and a longer term "real" fix, most customers rejected the tanker solution as an unnecessary effort. For interruptions lasting between 12-24 hours, most customers felt they could cope with less drastic solutions while the issue was fixed. Customers emphasised that they were not keen on having tankers for extended periods of time either.

In the **consultation on Anglian Water's draft PR19 plan**, participants in the online community were introduced to the company's plans to reduce unplanned and planned interruptions lasting for three or more hours. Participants were told that by 2020, expected performance on interruptions will be an average of 12 minutes per customer per year, based on meeting current performance commitment levels. They were told that Anglian Water's proposed stretch commitment level for the new plan is five minutes and 24 seconds by 2025 (based on a forecast of how the top quartile of companies will improve between now and then). The consultation feedback revealed that this **commitment "delighted customers" and met with resounding approval**. It supported perceptions of Anglian Water as a good performer in this respect. Participants recognised the target was challenging, but felt it was very worthwhile. However, some wanted more information on how many companies there were (to understand the top quartile reference).

In the acceptability research on the outline business plan, most customers felt the water supply interruption targets were sufficiently stretching (74% of all household and 93% of all non-household customers). Hartlepool Water customers were significantly more likely than Anglian Water customers to say the supply interruption targets were sufficiently stretching. Household customers who understood the water measures were significantly more likely than non-household customers to say they didn't know if the interruptions targets were sufficiently stretching.

Members of the online community who took part in the consultation on the draft plan were also introduced to the company's aim to reduce the percentage of the population supplied by a single supply system. Customers were told that some customers are connected to only one water treatment works. As there are no alternative sources for these customers, they face an increased chance of an interruption to their water supply should something go wrong with the water supply. Participants were told that in 2015, Anglian Water had 46.9% of the population on a single system, and it is currently aiming for this to come down to 24.7% by 2020. In the draft plan, the company is proposing a new stretch target of 15.5% by 2025, with performance at 0% by 2035. The consultation found that participants generally felt this was a good idea, even if it was not considered quite as important as other areas of the plan. Some participants felt that this was not an

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immediate priority, as interruptions are currently infrequent, and the money might be better spent on other things.

In the acceptability research on the outline business plan, the percentage of the population on a single supply also emerged as an issue of relatively low importance. Forty six percent of household customers felt this was of high importance (the top ranking issue was mains bursts on 82% and the bottom was AIM on 36%). Forty four percent of non-household customers felt this was of high importance, the bottom ranking issue along with per capita consumption and low pressure, also on 44% (the top ranking issue was mains bursts on 81%). Most customers felt the targets for single supply were sufficiently stretching (79% of household and 95% of non-household customers). Customers of Hartlepool Water were significantly more likely than Anglian Water customers to say the targets were stretching.

Raw water resources

(Longer-term) Drought-related restrictions

What we already know (as at June 2016)

Evidence on people's views about and experience of drought-related measures is mixed. Stakeholders who took part in qualitative research were generally positive about Anglian Water's efforts to manage the drought. The majority of household (72%) and non household (80%) customers who responded to the PR14 Willingness to Pay survey also indicated that they were satisfied with the frequency of hosepipe bans during periods of drought. The Drought/Water Efficiency research suggests the majority of respondents had not been inconvenienced by the ban when it was in place. Nevertheless, some participants in qualitative research and engagement activities expressed some frustrations about this issue (some people felt there would have been less of a need for a ban if more had been done to conserve water already in the treatment system). Many customers also expressed confusion about why the 2012 hosepipe ban had been required after recent rainfall. Across several qualitative evidence streams a few customers express frustration about other customers flouting bans; some argue insufficient attention is given to enforcing them.

The Willingnes to Pay Main Study focus groups found that water restrictions were not an issue among customers in Hartlepool.

The PR14 Willingness To Pay main survey focus group research (conducted in April 2012) found that people were aware of the (then current) water shortage but also understanding about it, therefore Anglian Water avoided real criticism. However, evidence from several quantitative data sources suggests that customers regard leaks as a key reason why restrictions are sometimes necessary in the first place. Multiple evidence streams identify that customers and stakeholders want clear evidence the company is doing their bit to tackle leaks (rather than simply imposing restrictions on them).

The 4th wave of Drought/Water Efficiency research (conducted in September 2012) found **levels of concern about the consequences of water shortages**

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among household respondents to have remained at lower levels than were seen during the hosepipe ban. However, there remained high levels of concern at the potential impact of shortages on **farming and food prices** (although this had reduced overall), and more customers were now concerned that water meters might become compulsory.

Resources (Stated Preference) survey said they had a **leisure activity likely to be affected by water shortages**; car washing, the enjoyment of rivers, and maintaining gardens were commonly identified. Business respondents, in general, did not rely on leisure activities likely to be affected by water shortages (car washing and gardening were the most likely to be cited).

Research suggests that **severe water restrictions** (such as rota cuts and standpipes) **are one of the most unwanted of all service failures**. The Stated Preference study indicates that customers are willing to pay to avoid these failures and don't expect to experience them in their lifetime. The results show that a rota cut every 100 years (with expected duration of two to eight weeks) has the same impact as a hosepipe ban once every 10 years (with expected duration of four to six months). This shows that **acceptability of rota cuts and standpipes is extremely low**.

The Stated Preference results also show that, for all types of restrictions (hosepipe bans, non essential use bans, and rota cuts/standpipes) **frequency is considered to be more important than duration.** (This means higher frequency/lower duration events are considered less preferable to lower frequency/increased duration events.) However, evidence from qualitative suggests it is important to customers to know how long measures are likely to last so they can plan around this.

(Unknown source): A national study, based on research evidence from the Anglian and Southern regions, found that **during periods of drought** most customers claimed they tried to change their behaviour to conserve water. However, while there was some concern about climate change, and customers recognised the possibility of more frequent water shortages as a consequence, this did not necessarily translate into action. People were **more accepting of the idea of restrictions** than they were of paying more to ensure supply.

What's emerging (Autumn 2016 onwards)

In the acceptability research on the outline business plan, of a list of 12 water measures, the risk of severe restrictions in a drought was judged to be of middling importance. Fifty four percent of all household customers agreed this was of high importance (the top ranking water measure was mains bursts on 82% and the bottom was AIM on 36%). Sixty percent of all non-household customers felt it was of high importance (the top ranking issue was mains bursts on 81% and the bottom was single supply, low pressure and per capita consumption all on 44%).

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The online community activities found that measures such as hosepipe bans and non-essential use bans don't feel overly detrimental to customers, although customers had some concerns about the potential impact of non-essential bans on local businesses and employment. Customers were much more concerned about "severe" measures that could drastically affect their quality of life (and potentially customer safety). Customers felt that rota cuts were severe enough to be avoided. Their primary concern was about sanitation (being able to flush the toilet). They were also concerned about the impact of rota times on particular customer groups (such as those working night shifts, and on the elderly and vulnerable, and on families). However, they were reassured that emergency services will still operate, and felt that with sufficient planning and communication the experience may be bearable for a short time. However, having no tap water at all felt too extreme and was viewed as a serious failure of Government and water companies. Customers were particularly concerned about the potential impact of not having tap water on health, and the way in which street level supply would be managed to avoid chaos and crime.

At the "testing the water" stall at the H2OMG event, customers were told that in a really severe drought there would be no water from the tap and they would have to collect all their water from a central point. Customers were asked if they had heard of this. Of the 1678 customers who completed a survey, 49% said no, 40% said yes, and 11% said they were not sure. Customers were then asked how they would deal with having no tap water and having to rely on stand pipes in the street. On a six point scale from not well to very well, 47% of customers chose the most negative option. In total, 77% of customers chose one of the three more negative options, sugesting they would not cope well with this scenario. Customers were also asked for their views about future service levels and the frequency of service restrictions that they would find acceptable (restrictions included hosepipe bans, non essential use bans, stand pipes and rota cuts). Sixty one percent of customers said they felt it would be acceptable to experience restrictions at least every 10 years (21% said every 10 years, 40% every few years). Twenty six percent of customers felt restrictions should occur less frequently (once in a generation to less than once a century). Thirteen percent of customers felt it would never be acceptable. (Note, this was not robust quantitative research that provides insight into the distribution of views across the customer base.)

In one of the future customer workshops, students were asked to choose which of the following areas was the **priority to continue supplying with water in the event of a drought**: domestic customers; agriculture; and industry. The majority of the students chose agriculture, as they felt that crops and livestock were essential to life. When students were free to choose a fourth area, the environment, approximately two thirds chose this instead. They felt that if there was no water in the environment, there would be no water for anything else.

Data from the CCWater Water Matters research (from 2016/17) found that most customers of Anglian Water were confident that their long-term water supply will be available without restriction (74%, n=384), however

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confidence was lower than the average for all combined companies (80%, weighted), perhaps reflecting customers' awareness of particular pressures on the region (the range was 73%-86%). Over the same period, a higher proportion of Hartlepool Water customers said they were confident of this aspect of their service (88%, n=146), perhaps reflecting a perception that restrictions are less of a pressing issue in this part of the country. The range for all water-only companies was 66%-89%, with a weighted average of 73%. (Note, this question does not appear to have been asked in 2017/18).

The online community activities specifically focused on drought found that customers view the solution to drought as a **shared responsibility** between customers (who need to change their behaviour) and Anglian Water (which needs to invest in infrastructure, fix leaks and support behaviour change, for example by introducing compulsory metering). Customers **spontaneously suggested ways to avoid drastic measures**, for example by implementing hosepipe bans sooner and more frequently at the first signs of a drought. However, customers felt it was important for **businesses to be asked to change their behaviour too**, as it was perceived that action by householders alone was unlikely to be effective. In the same research, and echoing findings from other activities, **discussion of extreme measures led customers to question whether Anglian Water is doing everything it can to conserve water and continue to meet demand.**

Some of the most robust data on long-supply issues comes from the Main Stage Willingness to Pay survey and the Water Resources Second Stage survey. This research suggests that awareness of severe restrictions is lower than for other types of restrictions, especially among household customers. Perhaps as a consequence, satisfaction with some aspects of current performance is higher for household customers. However, for both types of customers, on average, acceptable levels of service are above current levels for more severe restrictions (rota cuts and no tap water). Household customers have strong preferences for avoiding deterioration and for improvements in relation to no tap water. Non-household customers have strong preferences for avoiding deteriorated levels of service and improving service levels for no tap water and rota cuts. Both household and non-household respondents think more severe restrictions should be imposed for the minimum length of time possible. Severe restrictions have less importance as an issue for customers of Hartlepool Water.

In the Water Resources Second Stage study, results from the initial "package" question revealed that hosepipe bans were the most common service problem experienced by household customers (from the list of 10 provided), with 57% reporting experiencing a ban at some point. Unsurprisingly, then, in the same study, in the main restrictions survey, household respondents were more likely to have heard of hosepipe bans (83%), than other restrictions (45% had heard of the possibility of having no tap water, 41% non-essential use bans, and just 21% rota cuts). With the exception of hosepipe bans, non-household customers were more likely to say they had heard of all the

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different types of restrictions (in particular non-essential use bans, which 60% had heard of, and rota cuts, at 43%).

In the (DCE) Willingness to Pay survey, in relation to water services, **78% of household customers said they found performance on rota cuts to be either satisfactory or somewhat satisfactory** (the percentage for leakage was 75%, unplanned interruptions was 76%, and discolouration was 79%, n=550, combined and water only subsamples). In the BWS version of the survey, household customers were asked about the **aspect of current performance/service they considered the best and the worse.** In relation to water services, **rota cuts were considered the best aspect of service** by the largest proportion of respondents (36%) and by the smallest proportion as the worst (15%), followed by unplanned interruptions (30% considered this the best, n=304, combined sample, BWS survey).

In the DCE Willingness to Pay survey, the majority of non-household customers also rated performance for rota cuts to be satisfactory (58%), although satisfaction was considerably lower for non-household than for household customers (n=253, combined and water only subsamples).

In the same survey, **most household respondents opted to maintain current performance levels** for water services (between 60%-72% depending on the attribute). For those that indicated that service levels should improve, the priority was reducing leakage (32%), with **low levels of support for improvements to rota cuts** (17%), as well as unplanned interruptions (19%) and discolouration (23%, n=550, combined and water only subsamples, DCE). Nonhousehold customers also viewed leakage as the priority for improvement in relation to water services, with 42% opting to improve performance and just 41% opting to maintain it. Unplanned interruptions were rated higher (30%) than discolouration (23%) and rota cuts (21%) as an improvement priority (n=253, combined and water only subsamples).

In selecting a package of improvements relating to the water service, the Willingness to Pay (DCE) choice task indicates that household customers gave the greatest weight to leakage (26%) and change in the bill (24%). Rota cuts accounted for just 15%, unplanned interruptions for 19%, and discolouration for 16% (n=551). Non-household customers also placed the greatest weight on leakage (29%) but they also placed weight on severe water restrictions (22%), with less emphasis given to change in the bill (19%). Unplanned interruptions was ranked joint last with discolouration (both 15%, n=253).

Disaggregated results for Hartlepool Water household customers from the Main Stage Willingness to Pay survey suggest that, overall, Hartlepool Water customers' priorities are aligned to those for the wider Anglian Water region. However, the choice model analysis indicates that "severe water restrictions" has a noticeably reduced level of importance for Hartlepool Water customers.

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In the Water Resources Second Stage research, before completing the main choice task in the restrictions survey, customers were asked about the **likely impact of various restrictions** on their lives. Among household customers, having no tap water was perceived to have the greatest impact, with 86% saying this would affect them "severely", "a lot" or "quite a bit". This was followed by rota cuts, at 72%. Responses for both non-essential use bans and hosepipe bans were much lower, at 28%. For no tap water, the greatest concerns were not having water for everyday activities, such as cooking, washing and cleaning (72%), followed by health impacts on the respondent or their family (60%), and struggling to queue at a standpipe (36%). For rota cuts, the greatest concerns related to not being able to use water for everyday activities (65%) and not being able to flush the toilet for hours at a time (58%).

For non-household customers, having no tap water was also perceived to have the greatest impact (81% stating it would impact them "severely", "a lot" or "quite a bit"), followed by rota cuts (at 71%). Results for non-essential use bans and hosepipe bans were ranked lower, though higher than the corresponding household results (at 42% and 38%). For no tap water and rota cuts, there was a greater concern among non-household than household customers that their own business would have to close as a result of disruption to the water supply. For rota cuts and no tap water, there was also a high level of concern about not being able to use water for everyday operational issues (47%, after the impact on flushing toilets at 48% for rota cuts, and 43%, after the impact on young families at 44% for no tap water).

In the Water Resources Second Stage research, for household customers security of supply (or drought restrictions) was among the service areas receiving the lowest bill allocation. In contrast, after leakage reduction, non-household customers allocated the highest percentages to security of supply (or interruptions, depending on the version of the survey used).

These results were generally confirmed in the post survey validation focus groups, where household customers expressed little concern about the impact of hosepipe bans on their day to day life. There was more concern about nonessential use bans, especially among younger people whose leisure activities (e.g. visiting parks and pools) might be impacted, and in relation to farming and food production. Rota cuts were considered more serious still. However, customers generally felt they would be able to manage them, so long as the duration could be tolerated. There was consensus that turning the water on for six hours and off for 18 hours was preferable to a 24 hours on and 24 hours off cycle, as it allowed basic daily routines to continue. There was support for schools, hospitals and health centres being exempt from rota cuts. However, there was incredulity among participants in the focus groups that having no tap water could ever occur, given the amount of rainfall in England. Customers felt they could just about cope with this for a couple of days, but that after that, their lives would be severely impacted. There were concerns about civil disobedience, and some people said they would consider relocating to unaffected parts of the country. Customers expressed particular concerns about the impact of both

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rota cuts and standpipes on the elderly. Hearing about both of these more severe restrictions led customers to question whether Anglian Water was doing enough to tackle leaks and conserve water; they wanted to be reassured that such events were the result of extreme weather conditions rather than mismanagement or underinvestment.

Before completing the main choice task in the Water Resources restrictions survey, customers were also asked for their views on how acceptable it would be to experience each type of restriction (in terms of expected frequency). While some household customers thought it was acceptable for hosepipe bans and non-essential use bans to occur more frequently, the average response was in line with current service levels. Results for rota cuts show that a significant minority might find more frequent events acceptable (44%), but another group feel these should never happen (25%). These results are inverted for no tap water. On average, however, results suggest that acceptable levels for rota cuts and no tap water are above current levels of service.

Non household results on acceptable levels of service are broadly similar. For hosepipe bans and non-essential use bans, the frequency most likely to be seen as acceptable is below the current levels of service, however the average is in line with it. While views on rota cuts and no tap water also show significant acceptability for deterioration, average acceptability is again at or above current levels, with having no tap water being less acceptable than rota cuts.

Results indicate that household and non household respondents think more severe restrictions should be imposed for the minimum length of time possible. Results on duration are more mixed for non-essential use bans and hosepipe bans.

These findings were also generally confirmed in the post survey validation focus groups, where household customers expressed little appetite to improve current service levels for hosepipe bans and non essential use bans (though they were also keen for them not to deteriorate). Customers felt similarly about rota cuts. Although there was more concern about the current level of service for standpipes, this was still seen as somewhat acceptable, as people did not feel they were likely to be affected. However, discussion of other, recent, one in 100 year events led participants to express more concern about preparing for the unpredictable. Customers were prepared to pay an extra £2 to bring the level of service for standpipes in line with the rest of the industry, particularly if this was a one-off payment and they could be reassured that it would definitely be allocated to this issue.

The main choice task in the Water Resources restrictions survey quantified how improved and deteriorated levels of service for each type of restriction impact on customers (relative to a base situation, and expressed as odds ratios). The research confirmed that household customers have strong preferences for avoiding deterioration and for improvements in relation to no tap water. They have weaker preferences for changes to other restrictions, including for rota cuts. When customer preferences were compared across each combination of

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restriction and frequency, the strongest preference by far was to avoid the risk of having no tap water at one in 50 years. Having no tap water one in 500 years is viewed as similar to the current level of service for rota cuts at one in 100 years. This suggests that, for households, having access to some water each day, even if only for a few hours, is considered manageable, whereas only having access to bottled water and water from standpipes is less so. There were no statistically significant differences between preferences for restrictions among household customers by socio-economic grade. A similar picture emerges when the data is segmented by Anglian Water customer segment.

The survey confirmed that non household customers have strong preferences for avoiding deteriorated levels of service and improving service levels for no tap water and rota cuts. The research suggests non-household customers are indifferent between these restrictions and do not distinguish between their impacts. The strongest preference by far was to avoid the risk of no tap water or rota cuts one in 50 years.

Results from the choice exercise suggest that the highest levels of improvement for each restriction type are weighted less strongly by customers relative to the intermediate improvements. This "insensitivity" is consistent with the notion of diminishing marginal gains. Improved levels of service are also generally weighted less than deteriorated levels of service, consistent with the notion of "loss aversion" (whereby losses are perceived to be more significant than gains of the same order of magnitude). This affect is greatest for no tap water and rota cuts, for both types of customer.

In the consultation on Anglian Water's draft PR19 plan, participants in the online community were introduced to the company's plans to reduce the proportion of customers at risk of severe water restrictions to 0% by 2025. Participants were told that as the metric is based on a 25-year average; reporting against it will show a gradual decrease to 0%. The consultation revealed that the 0% target was what participants wanted. Eliminating severe restrictions was applauded for being a bold ambition. However, some participants questioned how it will achieved in practice, and whether a 0% goal is realistic, given that water levels may not be known.

In the acceptability research on the outline business plan, the vast majority of customers felt the targets for reducing the risk of severe restrictions in a drought were sufficiently stretching. Eighty two percent of all household customers agreed (the top ranking water measure) and 90% of non-household customers (the fourth ranking issue of 12).

Sewerage collection, Water recycling, Developerled growth

Flooding

What we already know (as at June 2016)

The vast majority of evidence on this topic comes from the Second Stage Flooding (Stated Preference) study. This indicates that more than half of household and business respondents believe that **flash flooding and river**

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flooding is increasing. There was a high degree of uncertainty around sewer flooding and mains water flooding trends, but those who took a view were much more likely to say these problems were not increasing.

Both household and business customers who responded to the survey regarded most options for reducing flood risk as effective (building river defences, building sea defences, creating more green spaces, building larger sewers, preventing new developments, making hard surfaces permeable, and preventing rainfall draining into sewers). Confidence was lowest with stopping rainfall from draining into sewers and highest with building more river and sea defences.

Respondents' direct experience of internal or external flooding at home or work was limited and it was not always possible to know the source of flooding. The vast majority of customer experiences of sewer and mains flooding related to external incidents.

Less than a fifth of flooding incidences affecting business customers and a third of incidences affecting household customers went **unreported** to anyone.

Some respondents to the consultation emphasised that **Anglian Water has a central role to play in flood protection** and management of flood defences. Of particular concern to these respondents are **new housing developments, which are perceived to be a major cause of flooding**. Respondents were keen for the company to work in partnership with government and local planning authorities to manage housing demand and improve flood management.

Respondents to the Domestic Customer survey were asked what had influenced their choice in completing the investment simulator. Six percent of respondents mentioned flood prevention as a priority area for investment. A number of these respondents mentioned that flooding was an increasing problem and so more funds should be invested in flood prevention.

The Second Stage Flooding study shows that customers value preventing external flooding much less than preventing internal flooding. It showed that sewer flooding is much worse than water flooding, even when the extent of the damage caused by each is the same. This is primarily because of the health risk customers associate with sewer flooding. The study indicates that preventing sewer flooding of homes and care homes is the highest priority. Public organisations are the next highest priority to protect from flooding. Businesses and agriculture are lower priorities. The study also suggests that frequency is of high importance when reviewing flood risk. In other words, a property flooded 10 times in 10 years was worse than 10 properties each flooded once in a 10 year period.

The Second Stage Flooding study found that customers do not generally understand levels of protection from flooding at Anglian Water sites and have no experience of treatment works in the Anglian Water region being flooded. Customers assumed that all treatment works in the region would have some sort of protection from flooding; most thought that such flooding would be highly disruptive and should be protected against. Protecting water treatment works

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from flooding was prioritised above preventing flooding to homes. Protecting sewage treatment works from flooding was also important (in relative terms slightly less important than preventing flooding to homes but more important than preventing flooding to businesses and public organisations).

The Customer Education Strategy for Wastewater research finds an industry consensus that targeted engagement with those affected is the best approach to encourage affected customers to accept sewer flooding mitigation measures.

At the future customer workshops (2013), young people in Hartlepool felt resilience was not such an important issue for customers there, compared to those in the "south". However, there was **acknowledgement of the greater risk of flooding in Hartlepool**, due to the higher levels of rainfall and the urban ground coverage.

What's emerging (Autumn 2016 onwards)

Analysis of Anglian Water's **complaints data** for the period 1st April 2017-31st March 2018 revealed that 6591 written complaints were received from customers during this time. Just 4% of these complaints related to flooding (or 278 complaints).

However the analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that **floods and outages drive negative sentiment about the company**. For example, an outage in Milton Keynes in July and flooding in parts of the East of England in August were found to have made these two months the most negative for Anglian Water during the period reviewed. An analysis of topics discussed on social media during the review period revealed that flooding was the fifth most popular topic by volume, and the second by engagement. It featured in 393 conversations that had a potential reach of 98.2K people.

The customer world focus groups also found that customers were **concerned about flooding.** Linking this issue to climate change increased levels of concern about wider, longer-term changes to the climate. However, discussions on the online community suggest many customers are confused about **how scarcity can co-exist with flooding**.

The online community activities specifically focused on flooding found perceptions of flood risk were related to experience. Customers with first hand experience were the most aware and concerned about future flooding risks. Those customers who felt least at risk lived in places they feel are protected, for example areas on higher ground, benefitting from man-made flood defences, or having no history of flooding. The research found that customers' perception of risk can suddenly increase, even if they don't live in a known risk area, when they experience a visible build up of water near their home following heavy rainfall.

The research found that customers take various actions to try to deal with flood risk. Before buying or renting a property, customers who were informed about flood risk took advice from parents, checked Environmental Agency flood maps, ran flood reports, and actively avoided homes at risk. When faced with an

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immediate risk, customers took action to prevent damage, for example by following Environment Agency weather warnings, installing sand and air bags, and sealing off basements. In the longer term, those customers who felt their properties were at risk made small adjustments to their home, such as installing gravel, turf, gutters, ditches or soakaways, clearing gutters and ditches, and removing impermeable surfaces.

Participants in the same research demonstrated **empathy with those customers who had experienced the negative impacts of flooding**. These were thought to range from immediate impacts (the emotional distress of losing possessions and the emotional, financial and physical burden of reversing flood damage), to chaos in the aftermath (the stress of coping without a home, disruption to family life and wellbeing), and longer-term financial impacts (uncertainty over insurance claims, rising premiums, and difficulties renewing insurance and selling properties). Participants were **more sympathetic towards customers who experience flooding for reasons that are not perceived to be in their control**, for example storms and heavy rain or burst pipes. They were less sympathetic towards those who experience flooding after choosing to live in a known risk area. **Living on a flood plain was seen as a bad decision.**

Findings from the main online community trial confirm that customers see a **link** between flooding and housing growth. Quotes from those who took part reveal some customers are strongly against building more housing on flood plains. Students at one of the future customer workshops also questioned why this was happening. Some customers who took part in the main online community felt that developers, rather than customers or Anglian Water, should pay to deal with the consequences of this. Findings suggest that communicating Anglian Water's involvement with developers, policy-makers and environmental protection agencies will be key to convincing customers it is developing an appropriate resilience strategy, particularly around flooding.

In the Acceptability testing on the Strategic Direction Statement, flooding was one of the areas that customers were **keen to see more emphasis on in the ten outcomes**. Of Anglian Water's seven water quality and customer satisfaction goals, zero pollutions and flooding was voted **second most important**, after compliant and chemical-free drinking water, (with 93% of customers saying this was important).

In the online community research focused on flooding, participants supported the idea of a progressive surface water management strategy. The focus on keeping water in one place felt efficient and less wasteful than relying on the network alone. Participants felt reassured that something was being done about this issue, and learning about it positioned Anglian Water as a company that is aware of long-term sustainability issues. There was support for the company's goal to reduce unwanted water flow by 100%. Participants felt that efforts to safeguard a precious resource and overcome the negative impacts of flooding on customers justified investment.

At the same time, some participants voiced **reservations about the strategy**. Some felt that Anglian Water should have taken action in this area earlier, and

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questioned whether they will see the benefits of investment in their lifetime. Others were concerned that the strategy was placing more responsibility on to the customer to pay for preventative measures, either directly or through the bill. Some participants pointed out that more obvious solutions haven't yet been addressed, such as clearing gutters, drains and ditches (although they were unsure if this was Anglian Water's responsibility). Some questioned why Anglian Water hadn't already ensured that surface water was managed sustainably on their own land. While supporting the goal, participants wanted to see a timeline and some intermediate outcomes, in addition to the ultimate targets. Some cautioned that initiatives may be more challenging to implement in practice, and questioned whether the costs would outweigh the benefits. Participants also highlighted a need to clarify the meaning of certain terms and acronymns, incuding SuDs (Sustainable Urban Drainage Systems).

Participants in the online community flooding research felt that **SuDS** were likely to have a number of benefits beyond flood prevention, including saving money, improving the local environment, and providing an opportunity to educate the public and foster local community spirit. However, some felt it was beyond their control to install SuDs, for example, those living in rented or council accommodation, with no garden, or who were older or with disabilities. Participants also highlighted the challenges of retro-fitting properties, raising concerns about the time, money and labour involved. Participants whose properties were not at risk of flooding also questioned the need to install SuDs themselves, and struggled to see how this would contribute to reducing flood risk more widely.

Some SuDs were viewed as more feasible to install for customers. For example, water butts were seen as affordable, easy to install and to maintain, and with the added benefit of providing pay back in the bill. Participants pointed out that soakaways are often installed with new drives and are a council requirement. Gravel paving is often favoured because it is cheaper, rather than because it is environmentally-friendly. Disconnected downpipes are considered good in theory, but customers had some concerns about where the water will go.

Other SuDs were seen as much more complex and expensive. For example: installing ponds, which have aesthetic benefits but require space; creating wetlands and rain gardens (which could, however, be managed as community projects by schools, colleges and businesses); and installing permeable paving, which was seen as more involved and expensive. Some measures such as green roofs, were seen as niche strategies involving enormous expense and time. Few participants had heard of other measures, such as swales, filter drains and bioretention areas; some felt the terminology used to refer to these options was confusing.

The valuation research on flooding and roadworks found that the **impact on customers' wellbeing of flooding is considerably higher than that of roadworks, per incident.** (The wellbeing impact value for the aggregate "all types of flooding" category is more than 10 times the average value for roadwork incidents). The research team suggest that while roadworks represent a disturbance to people's quality of life that is more frequent in nature, roadworks

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have less impact per incident. In contrast, flooding is less frequent but has more impact when it occurs. The research found that per incident the **impact on customer wellbeing of both flooding and roadworks was higher in urban than rural areas**. This is largely because there tend to be a significantly higher number of households living nearby to an incident in urban areas, due to greater population density.

The research found that water flooding had a slightly larger impact on customers' wellbeing than sewer flooding. The research team suggest that this result may in part reflect the fact that the average water flood tends to affect more people than the average sewer incident. However, they conclude that further research is needed to confirm this hypothesis. To draw stronger conclusions about the impact of water flooding relative to sewer flooding, they also suggest that data is needed that separates out internal and external water flooding incidences.

The research also found that **internal sewer flooding has less wellbeing impact per incident than external sewer flooding**. Again, the research team suggest this is because an internal flood typically affects just one or a few households, even though the impact on those affected is high. An external flood has a much lower wellbeing impact on each affected household, but the number of affected households is much greater, making the total incident value larger.

The research also found that **repeated incidences of flooding do not impact as strongly on wellbeing as the first incident**. The authors suggest that further research is required to explore the hypothesis that individuals may adapt to the negative effects of repeated flooding, lessening the incremental impact of later incidents. Possible contradictions with the PR14 Second Stage Flooding research (which found that high frequency flooding of homes was seen as the worst scenario with very high willingness to pay estimates), may warrant further exploration, though could be related to methodological differences (see below).

The research found that adjusting the results for estimates of the compensation paid out by Anglian Water does not affect the valuation results for any of the types of flooding analysed. The authors suggest this is because compensation tends to be modest in relation to the overall impact of incidents.

(Note, there are a number of caveats to this research, including: that some confounding factors may be at play that are not accounted for in the data; the analysis does not reflect the possibility that some households are affected by incidents that are not in their locality; distances have been estimated from the centre of respondent's postcodes rather than their actual location; and flooding values are net of any third-party insurance payments (these last three factors mean that the full wellbeing impact of flooding may be higher than the research suggests). In addition, for internal sewer flooding, results from this study include the impact not only on the property directly affected but also indirect impacts on those living nearby, while stated preference results are based on respondent's impressions of the scale of the impact, as well as any altruistic concerns for properties directly affected. Although results for internal sewer flooding in the

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valuation research are statistically significant, it is also worth noting that the sample size is low at n=85).

In the consultation on Anglian Water's draft PR19 plans, customers from the online community were introduced to the company's plans to make network improvements to tackle sewer flooding arising from storms. Participants were told that during extreme rainfall, there is a risk that wastewater can escape from pipes and cause flooding in open areas or inside people's homes. They were told that Anglian Water is undertaking a significant piece of work to understand their performance in this area and by 2020 will have all their water recycling catchments modelled and the results analysed. In the new draft plan, the company is aiming to maintain the current level of service, which will be stretching given projected housing growth and the increased likelihood of extreme weather. Consultation feedback suggests customers appreciate the company's attempts to forward-plan and anticipate the needs of a growing population. However, for some, the focus on "maintaining current levels" of performance did not feel stretching enough. There was an expectation that developers are contributing to some of the costs in this area.

AII

Investment in resilience and reactions to company plans

What we already know (as at June 2016)

Many customers who took part in qualitative research and consultation appear prepared to pay a little more to tackle future challenges. However this was usually dependent on monies going to support improvement (not profit) and Anglian Water 'doing their bit' to tackle leaks and safeguard the service for the future. In general, participants in these activities wanted Anglian Water to fund additional activities and improvements from profit, before asking customers to pay more.

In the consultation, 68% of respondents said that Anglian Water should invest at the same rate as they do now in resilience (reducing the risk to supplies slowly to keep bill increases to a minimum), and 23% said the company should increase the rate of investment to improve resilience quickly, (with a short-term increase to bills). However, consultation participants are self-selecting so figures cannot be considered to be representative of the wider population.

Among respondents to the Domestic Customer survey who were asked to complete the investment simulator, opinion about investment in securing water supplies was finely balanced. Forty eight percent chose to increase spend from the preset level, while 52% chose to maintain spend at the current levels (there was no option to reduce spend). On average, customers chose to increase spend to the level of 26% of the available envelope. On average, male customers and customers in the highest income bracket opted for a higher level of investment in this area. Customers from households of 5 or more people were more likely to opt for a decrease in investment than single occupants.

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Many of those customers and stakeholders who took part in qualitative research and engagement activities found **it difficult to comment** in detail on levels of risk and investment in this area; there was a mix of views about what is appropriate.

Nonetheless, the Acceptability research revealed **high levels of support for the company's resilience plans.** Ninety seven percent of the core sample of water and wastewater customers found plans in this area to be either very acceptable or acceptable.

What's emerging (Autumn 2016 onwards)

Evidence from this wave of research and engagement suggests that customers support investment to protect the water system and promote greater resilience. In principle, customers are willing to pay more themselves to help fund resilience measures, however this is often contingent on Anglian Water "doing its bit" to address the issues too. There is evidence of differences between customer groups in their willingness to pay for measures to boost resilience.

The online community activities on drought resilience found that over 80% of the (70) customers who took part said "yes" to investment to ensure a consistent water supply to homes during a period of drought. These customers did not feel that a known risk should be ignored, did not believe that in "modern" Britain people should have to suffer extreme measures (such as cutting water to homes), and felt that Anglian Water already had a range of options at their disposal to tackle the problem and therefore should do so. However, the activities found that accepting a price rise was dependent on action by Anglian Water to help customers to reduce their use (e.g. by providing tips and tools/devices), do all it can to save water itself (e.g. by tackling leaks), and invest in large-scale water supply options.

In the segmentation research, customers were asked which of the following options for reducing drought risk they preferred: paying more now to develop new sources of water; taking big steps to reduce the water they use at home so supplies go further; pursuing both of these options; or doing nothing (and accepting there will be restrictions in some years). Across the whole sample, there was stronger support for pursuing both options (38%, the top choice) and for reducing water use (33%); there was less support for paying more (10%) or doing nothing (14%). However, the research revealed differences in attitudes among customers. For example, the "comfortable and caring" group (26% of the customer base) were more likely to choose the "both" option (49%), while "eco-economisers" (14% of the customer base) were less likely to opt for paying more now to develop new sources of water (3%).

At the "wheel of fortune" stall at the H2OMG event, customers were asked the same question. Of the 1100 customers who voted, the **greatest number supported the option to take big steps now to reduce the water they use, followed by the option to do this and also to pay more** (the "both" option). There was less support for the options to pay more in bills (alone) and to do nothing. Customers were also asked the same question as part of a Twitter poll

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carried out in support of the H2OMG event. Of the 4334 customers who took part, the **largest proportion (47%) chose the "both option".** Nine percent said they didn't want to do anything, 17% said they wanted to use less water now, and 27% said they wanted to pay more and increase investment now. (Note, neither activity constitutes robust quantitative research).

At the end of the Willingness to Pay survey, customers were asked some follow up questions about the health and resilience of the water and sewerage infrastructure. Overall, there was strong support for maintaining asset health and boosting resilience in the network. Eighty three percent of household customers indicated that they strongly or tended to agree with statements concerning the pro-active replacement of pipes and sewers to avoid storing up problems for future generations, and the same percentage agreed it was important to ensure there is spare capacity in the system to deal with problems like extreme floods, power outages, and long periods of drought. However, just 37% agreed that it is right that customers should pay more today to help ensure future customers do not experience worse levels of service, with much less distinction on this question between those that were neutral (32%) and those that disagreed (29%, n=1353, combined subsamples, DCE and BWS surveys). Similar percentages of non-household customers supported pro-active replacement of pipes and sewers and efforts to ensure there is sufficient capacity and back-up measures in the system (80% and 82%). However, fewer non-household customers opposed paying more today for the benefit of future customers (21%, compared to 29% of household customers, n=500, all subsamples.)

Evidence cited in the Board debrief report on the strategy development process suggested household customers would be willing to pay between **10% and 20% more in their bill** to avoid serious problems in the future. In the online community activities on drought resilience, the most common suggestion from customers was a **10 percent increase in the bill**, but other suggestions ranged from £5-£20 per month. (Note, neither were robust pricing research).

In several other pieces of recent research, customers were presented with a range of scenarios for the future, each of which featured a different level of investment in major resilience and/or infrastructure improvements, along with a corresponding bill impact. They were then asked to choose between these scenarios. This evidence suggests most customers support options that involve "going beyond the minimum" to invest for the future. However, uncertainty about future risks, and affordability considerations mean that not all customers support the maximum level of investment under consideration.

In the online activities on water resource management, household customers were presented with **three investment options for the future**: protecting against drought *but not* climate change (costing £2.20 per customer per year by 2025); protecting against drought *and* climate change (costing £8.30 per customer per year by 2025); and future-proofing plans by building larger water capacity than is needed right now to protect against climate change risk (costing £10 per customer per year by 2025). The research found that the **maximum investment**, "**future-proofing**", **option garnered the most support.** In the context of the annual bill,

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customers said that £10 did not feel like a great deal of money to protect the water system against future risks. The research found that although climate change was not universally accepted, option three felt like a substantial investment in the infrastructure, which customers thought would also help in the context of housing growth in the region. This research also found some differences in opinion between customer segments on this topic with, for example, the "family first" group slightly more keen on investing just in climate change, and "eco-economisers" in drought-only options or in doing nothing.

In the second Community Research study on vulnerability (which explored customer reactions to Anglian Water's draft PR19 business plan), customers were introduced to three (differently framed) options for investment, with associated bill impacts. Assuming an average household bill of £412 in 2019-2020, with efficiency savings of £16, the options were: minimal additional investment in climate change and environmental improvement (resulting in likely annual bills of £455 in 2025, including inflation); additional investment in climate change or environmental improvement (leading to likely annual bills of £466 in 2025, including inflation); or additional investment in climate change and environmental improvement (leading to likely annual bills of £478 in 2025, including inflation). For each option, customers were asked to factor in a posible £20 reward or penalty (resulting in a corresponding decrease or increase in the bill) for reducing leakage, at the cost of £4 per household per year. Overall, the majority of participants preferred the second option (additional investment in either climate change or environmental improvement). This was seen as a good balance between taking some preventative action, while keeping cost rises under control, and recognising the uncertainty around the possible impacts of climate change. In most groups, there was strong minority support for option one (minimal additional investment), primarily on the basis of affordability. In half of the groups, there was strong minority support for option three (investment in both areas). Participants supporting this option felt the company needed to act now in relation to climate change and environmental protection; some hoped significant investment now might head off sharp bill increases in future. The research found some differences in levels of support for these options among different groups of customers. Older people (in Skegness) were especially sensitive to the cost of living and rising prices, in the context of limited increases in the value of their pensions. Affordability was also an issue of particular concern in the groups held with young women (in Ipswich) and those on low-incomes (in Corby and Hartlepool).

In the same research, in Hartlepool, customers were presented with a different bill profile, with smaller projected bill increases (partly due to Hartlepool Water sourcing most of its water from boreholes). These assumed an average bill in 2019-20 of £356, with efficiency savings of £11. The bill profiles were then (including inflation): option one £381; option two £387; and option three £396. The same potential reward/penalty applied for performance on leakage. The research found that low income participants in Hartlepool were more open to the options involving proportionately greater investment.

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In a poll carried out as part of the consultation exercise on the draft PR19 plan with members of the online community, participants were again presented with three scenarios: a minimum investment scenario, with an associated annual bill of £412; a scenario in which the company invests in either environmental improvements or climate change, with a bill of £422; and a scenario in which they invest in both, with an annual bill of £433. Overall, most customers supported option three (the maximum investment position). This was thought to be the best option by most participants as it covered all the important issues, felt the most ethical and socially responsible, and offered much more in terms of benefits than the middle option (with only a small increase in cost). The first option was generally viewed as false economy (deferring issues rather than dealing with them now). The second option felt like a moderate, cautious and cost-effective approach to some, but felt **short-sighted** to others. However, while generally supporting option three, some customers questioned how accurately Anglian Water can forecast the future and how much flexibility there is to change tack if necessary. Some participants said that if they had been given the choice, they might have preferred a course of action between options two and three.

In terms of the phasing of investment in resilience measures, the acceptability research on the outline business plan found that the majority of household customers wanted work to protect against climate change to be completed over the next five years rather than some of the work being deferred (between 59%-73% depending on the company/region). Similarly, 75% of nonhousehold customers wanted work to be completed over the next five years. The research also found that household customers generally preferred the costs of dealing with climate change to be reflected in bills as work is undertaken. Between 36%-56% of household customers preferred this option (depending on the company/region), while 30%-46% preferred the costs to be reflected in bills over a longer period of time. Anglian and Cambridge Water customers were significantly more likely than Essex and Suffolk Water customers to want costs to be reflected in bills as work is undertaken (45% and 56%, as opposed to 36%). Hartlepool Water customers were significantly more likely than Cambridge Water customers to prefer bill increases over a longer period (46% rather than 30%). Customers in the "family first" segment were significantly more likely than "protective provincials" to prefer a bill increase over a longer period. Among nonhousehold customers, 46% wanted to see the costs reflected in bills as work is being undertaken over the next five years, while 50% wanted the costs to be spread over a longer period.

In the Willingness to Pay survey, despite very strong support for resilience measures in general (see above), there was more marginal support for **favouring** long-term investments over those that deliver benefits in the next five years. Fifty two percent of household customers agreed with this (n=1353, combined subsamples, DCE and BWS surveys), while longer-term investments received slightly more support among non-household customers (58%, n=500, all subsamples).

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The online community activities on drought resilience found that **generating** widespread buy-in for resilience plans was strongly dependent on some key communications tactics: shifting drought perceptions (demonstrating that this *is* a problem that affects the UK and the region); painting a serious picture (that without action this could affect customers and their homes); introducing the 25-year plan (showing that Anglian Water is being proactive and supporting arguments with some hard facts), and addressing the sceptics (communicating the positive investment that Anglian Water is already making and planning to make in the network and infrastructure).

The online activities also found that customers recognise that they aren't the experts and trust Anglian Water to choose a mix of solutions that will be the most efficient and cost effective. Overall, reducing water use and loss was seen as less disruptive and costly and more achievable than supply side measures. However, taking steps to increase supply was seen as potentially more effective and reliable, and also had the added benefit of modernising the infrastructure.

Confirming these results to some extent, the Water Resources options survey found that, with a couple of exceptions, customers generally prioritise demand options over new water resource options. They prefer interventions that avoid perceived wastage (leakage reduction, recycling/re-using treated waste water) and promote efficiency (water saving devices), as well as a couple of new water resource options (storing water underground and extending existing reservoirs). Results also show that customers prefer options that are more reliable, and that all options are preferable to having more restrictions imposed (see below, on alternative sources of water, for more details).

The consultation exercise on the draft PR19 plan with participants from the online community found that, **overall**, **customers felt the "future proofing" measures set out in the plan justified proposed bill increases**. However, participants in the "protective provincial" and "careful budgeter" segments were particularly focused on customers having to "foot the bill" for improvements and were keen to hear more from Anglian Water about how they are making efficiencies to ease the financial impact on customers.

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Supply Meets Demand

General views on supply and demand

What we already know (as at June 2016)

As highlighted above, participants in qualitative research and engagement activities demonstrated awareness of **increasing pressures on the water system** and the specific vulnerability of the region (associated with population growth and development as well as a changing climate).

Participants in qualitative research and engagement activities were keen to know that Anglian Water was **working in partnership** to tackle pressures on the water

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system; there was particular support for the company to work with developers and social landlords to 'design-in' water efficiency measures.

What's emerging (Autumn 2016 onwards)

In the online community, after being introduced to the major challenges Anglian Water is facing (environmental protection, climate change, population change), customers acknowledged that the combination of increasing demand and decreasing supply is **creating a difficult playing field** for the company to operate on.

Findings from a range of research and engagement activities suggest customers are very aware of housing growth and population change in the region. For example, across the co-creation events, of the six major challenges faced by the company population change and new development emerged as the issue that customers were most concerned about. Discussions on this topic were highly emotive and generally negative in tone, with customers very concerned about the perceived unfairness of having to pay more to support new residents. While population growth was also seen as an important issue in the online community trial, this was seen as something that was out of customers' control, like climate change (in contrast, customers felt better able to influence the quality of the environment around them). In the online community activities specifically focused on drought resilience, some customers expressed scepticism about population change predictions (as well as climate change predictions). This was more common among older males and customers in the "careful budgeter" and "ecoeconomiser" segments.

In one of the future customer workshops, students pointed out that population growth would be associated with increased demand and decreased or rationed supply. They felt Anglian Water should deal with this by: encouraging reduced use (e.g. through education initiatives); increasing supply (e.g. through desalination and building more reservoirs); and use of advanced technology to manage the water system and re-use sewerage.

When customers in the online community trial were asked to rate Anglian Water's four strategic ambitions, **enabling sustainable economic and housing growth was most often rated second**, behind resilience (although customers saw a link between boosting flood resilience and growth).

When (five of) Anglian Water's retail customers were asked to prioritise these same ambitions, some assigned equal priority to several of the ambitions. However overall, retailers also prioritised "enabling sustainable economic and housing growth" a close second, after "making the East of England resilient to the risk of drought and flooding".

The acceptability research on the Strategic Direction Statement found that of Anglian Water's six major challenges, planning for the future was ranked 2nd in order of importance (seen as important by 86% of customers). However, population and economic growth was ranked joint 4th (seen as important by 77%, where the top ranking challenge was voted as important by 89% of customers and

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lowest ranking by 52%). In the same research, customers were introduced to Anglian Water's 10 outcomes. Supply meets demand was ranked as the **second most important outcome**, after safe clean water, (viewed as important by 93% of customers, where the top-ranking outcome was judged to be important by 97% of customers, and lowest by 67%).

Customers who took part in the main online community trial were not sure of the extent to which the company can or does influence new home development. However, they see a potential opportunity for Anglian Water to **influence the planning system** to ensure appropriate land use, and to **work with developers** to integrate sustainable technology into new homes. Quotes from customers on this topic suggest they would like to see **more detail** from Anglian Water about how it will do this in practice, including targets and timescales.

These results are supported by findings from two of the future customer workshops. Students felt it was important that technology was harnessed in new homes to "help people use less (water) in a way that they don't notice". Future customers were also interested in knowing more about what can be done to refit older properties.

In the online community activities focused on alternative water, customers also agreed that a **focus on new builds would be a natural starting point** to implement "green water". New builds were seen as a good testing ground for new technology (the learning from which can eventually be used to retro-fit older properties). Planning green water in from the start felt more straightforward than working around an established network, and it also reduced the need to convince and incentivise customers to make costly changes to their property. Customers were also generally supportive of partnership working with developers in this area; this was thought to position Anglian Water as an enabler and influencer (see section on alternative sources of water, below, for more details on green water).

When asked to think about what the **homes of the future** might look like (in 2050), customers in the main online community trial felt that sustainability would be built in, with water recyling, as well as other developments such as solar panels, air purifiers and self-generating energy through waste combustion.

The online community activities focused on drought resilience revealed that **not** all customers realised Anglian Water plans 25 years or more ahead to tackle resilience issues and balance supply and demand. Knowing this increased perceptions of it as a proactive and forward-thinking company. However it also meant that customers placed more trust in and responsibility on the company to maintain the future water supply, as they had now been forewarned.

The co-creation events revealed that some customers are **keen to know more about what Anglian Water are doing** to tackle long-term challenges, if new ways can be found to engage them appropriately. However, customers were clear that in discussing potentially alarming issues the company needs to be clear about what they are already doing to deal with the issues (as the experts).

In the **consultation on Anglian Water's draft PR19 plan** with customers from the online community, participants were introduced to the proposed **performance**

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commitment on developer satisfaction (D-MeX). Most participants liked the notion of a two-way, collaborative, relationship with developers. Participants generally supported the measurement of satisfaction in order to help deliver excellent service, although not all felt that a specific measure was necessary in this area. The involvement of Ofwat in tracking this measure reassured participants that performance was being independently verified. Not all participants were supportive of league tables, however. Some disagreed with competition in principle, while others felt league tables don't always capture all important aspects of performance, or reflect the fact that the context in each region is very different.

measure was ranked of relatively low importance compared to other retail measures. Forty two percent of household customers rated this of high importance (where the top ranking measure was supporting customers in vulnerable situations on 79%, and the lowest was the non-household retailer measure of satisfaction on 28%). Forty six percent of non-household customers rated the D-MeX measure as of high importance (the top ranking measure was the vulnerability priority register on 67%, and the bottom was managing void properties on 33%). Most customers felt the targets for the D-MeX measure were sufficiently stretching (67% of all household and 77% of all non-household customers), however the proportions of customers saying this were lower than for many of the other retail measures. Household customers who understood the retail measures were more likely than non-household customers to say that they didn't know if they were sufficiently stretching.

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Customers and water conservation

What we already know (as at June 2016)

The Delving into Water report commissioned by the Consumer Council for Water shows that the **average water use per person** per day by Anglian Water customers over 2010-14 has been decreasing year on year. In 2010-11 the average amount consumed (in litres) was 146.18. Compared with 2013-14 where the average amount consumed was 135.11. The report also notes that in line with government targets, water companies should be trying to reduce water consumption to an average of 130 litres per person per day. In Hartlepool the average amount consumed was 172.12 in 2013-14, which indicates that they have more to do in this area.

Research commissioned by the Environment Agency based on a literature review and survey of the UK population was able to identify **5 customer typologies** which captured different types of water consumption: disengaged; theory not practice; contemporary lifestyles; settled residents and conscious consumers. Each category represents between 15 and 20% of the population and analysis of the data suggests that there are material differences in the patterns of consumption between the categories across areas such as toilet flushing, dish washing and external use.

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The same research identified other notable trends. For example, **measured customers are more likely to engage in water-efficient behaviours** in relation to external use, given the financial incentives to do so. When it comes to the impact of age on water consumption, the research found that **water consumption is heavily influenced by stage of life**, with three distinct times suggested: prefamily, family, post-family. Additionally the research found that water efficiency savings can be achieved across the typologies.

A national study incorporating a literature review found that people are **more open** to water saving behaviours than they are to fitting water efficiency devices, though they are often only open to behaviours perceived to be easy to implement (e.g. switching off the tap when brushing teeth). Lifestyle factors generally appear to override the importance of environmental factors and people tend to believe they are already doing all they can to conserve water. The idea of reduced bills is often initially motivating to people but this is often counteracted by disappointment that there are not bigger effects as a result of water conservation efforts.

There was a range of water behaviours among customers taking part in research and engagement activities. The Second Stage Water Resources (Stated Preference) survey reveals a number of household respondents are very diligent with their water use, for example one in ten always use water from washing vegetables to water plants. However, at the same time, seven percent of household respondents said they never turn the tap off when brushing their teeth.

Anglian Water's Wave 4 Weather Sponsorship Branding Tracking survey explored customers' willingness to make changes to their lifestyle in order to save water. Across the four waves of the survey, between 80% and 90% agreed or completely agreed that they would be willing to make changes in their lifestyle in order to save water and therefore save money. Similar proportions also agreed or completely agreed that they would be willing to make changes to their lifestyle in order to be more environmentally friendly. When it comes to using water efficiently in their homes, 93% or more of customers across the four waves of the survey deemed this to be important or very important.

The Business-to-Business survey asked Anglian Water's customers to say how important they consider it to 'reduce their business's water usage'. Almost all participants (96%) said it was quite or very important to do so, a higher proportion than in previous waves (wave two: 89%; wave one: 87%). Around half (51%) of participants (wave two: 53%; wave one: 49%) were satisfied or very satisfied that Anglian Water Business is doing enough to encourage customers to take action to reduce water usage. The mean overall satisfaction score remains stable this wave (3.46 in both waves two and three), meaning that the gap between importance and satisfaction has increased (-1.26 compared to -1.08 in wave two and -1.17 in wave one). Almost two thirds of participants (64%) said they were interested in receiving more data from Anglian Water Business to help manage their water usage.

Across multiple evidence sources, most household customers say they are taking some steps to save water. For example, in the

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Consumer Council for Water Annual Tracker survey 2013, 78% of household respondents receiving services from Anglian Water and 62% of those receiving services from Hartlepool Water said they were taking action to reduce water usage. The Second Stage Environment (Stated Preference) study indicates that it is more common for household customers to say they regularly take steps to reduce their water use than business customers. However, it is not clear whether this is an on-going concern.

There is mixed evidence about whether water conservation is an issue of growing or declining importance. Fewer respondents to the Business Customer Satisfaction survey in 2013 indicated that they have set water saving targets this year. However, businesses taking part in qualitative research suggested the issue of water conservation and use was rising up their list of priorities, having already reviewed use of other utilities. Coming out of the hosepipe ban, 90% of household respondents in the Drought/Water Efficiency research said they made some or every effort to save water. However, the proportion of respondents saying they don't pay much attention to what they use was rising and the proportion of those saying they make "every effort" to save was declining (from the benchmark, in March 2012). In the Consumer Council for Water Annual Tracker survey, the proportion of household customer respondents receiving services from Anglian Water who say they are taking action to reduce water usage increased between 2012 and 2013. Nonetheless the proportion of household customer respondents receiving services from Hartlepool Water who say they are taking action to reduce water usage decreased between 2012 and 2013. Among Anglian Water customers, unmetered customers were more likely to do nothing than metered customers.

In the Second Stage Water Resources study it was **most common** for household respondents to say they fixed leaks and taps promptly, turned off the tap when brushing their teeth, and showered instead of taking baths. It was most common for businesses to have dual or low flush toilets.

The Drought/Water Efficiency Research indicates that **preventative behaviour for winter** among household customers (insulating pipes and water tanks, checking for leaks and ensuring boilers have been serviced etc) is completely **influenced by home ownership** (and therefore demographics and house type).

Household and business customers participating in qualitative research indicate that they often have a mix of motivations for saving water, including price, environmental beliefs, and a general dislike of waste. Household customers who took part in the Drought/Water Efficiency survey indicated that the main reason they save water is that it saves them money ("saving energy" was a reason that was increasing over time, while "ensuring there is enough for everybody" was decreasing). Businesses responding to the Business Customer Satisfaction Survey also said the main driver for setting water saving targets was cost savings (though sustainability and corporate social responsibility commitments were also important).

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The Drought/Water Efficiency Research indicates that unconscious habits were still the main barrier preventing household customers from saving water. However, this reported barrier was declining, while inability to control the behaviour of others and paying a flat price regardless of use was increasing. Qualitative research also revealed some challenges in influencing the behaviours of others in the household. The Business Customer Satisfaction survey suggests key barriers for businesses are the cost of implementing saving measures, a focus on other priorities, and lack of time.

A robust quantitative survey exploring customers' views about Anglian Water's performance against the "Caring for Communities" outcome found that seven out of ten (70%) agreed that **Anglian Water was promoting water efficiency.** However, multiple evidence streams (both quantitative and qualitative) suggest that many customers are prepared to do more to save water. More tailored advice from Anglian Water, low cost or free devices (or help in installing these), and greater evidence of payback in bills are some of **the things that customers say would encourage further saving**.

There is interest in and **support for Anglian Water's various campaigns.** Evidence from the Drought/Water Efficiency research suggests between two thirds and three quarters of people feel that the company's campaigns are "very" or "quite likely" to be effective in making them think water saving is important. Among those who remembered communications from the company, the **main message remembered was how to save money**. Evidence from multiple sources suggests there is room to further improve awareness of the company's campaigns.

Some participants in qualitative research and engagement activities would like the company to work more closely with **private and social landlords** to encourage water saving at home. However, the Voice of the Customer survey cautions **against excessive targeting** of messages at particular sections of the community. Household customers who responded to the survey wanted support to be available to all customers who were interested in taking this up.

Respondents to the Domestic Customer survey were asked to complete the investment simulator. Household water efficiency emerged as a **reasonably high priority** in this exercise, with 61% of respondents choosing to increase spend in this area from the pre-set level. On average, respondents settled on an increased level of investment that represents 28% of the total envelope of spend available in this area. When asked to explain the factors that had influenced their choice in the investment simulator, 10% of respondents said that they were influenced by a desire to conserve water or prevent waste. When asked which (from a list of 11) aspects of the service would increase satisfaction with the value for money of the service, "household water efficiency" was the fourth most popular choice, mentioned by 37% of respondents.

What's emerging (Autumn 2016 onwards)

Prior to completing the main choice task in the options survey for the Water Resources Second Stage research, customers were presented with a list

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of **potential demand and supply-side options** for supplying more water or managing water use, and asked to pick their top three, and the options that should not be used. Among household customers, after the most popular choice, leakage reduction, **providing incentives and education to save water was among the most popular options**. This option also featured relatively highly in non-household respondents' choices. Results from the main choice task (which involved choosing between the full range of options) suggest that in addition to a strong preference for leakage reduction and storing water underground (among both types of customers), **non-household respondents show a preference for providing water saving devices**. They also show fairly weak, marginal evidence (p<0.1) of a preference for incentives and education to save water (and some other improvements) among household customers from a higher socio-economic grade (AB).

Findings from the main online community trial, and the online activities on drought resilience, suggest that **customers do feel they have a responsibility** to conserve water. However, they want to know more about the **behaviours that will have the biggest impact**. Behaviour change will only feel motivating if customers feel it will make a difference.

The online community activities on water resource management found that although customers generally felt that reducing demand was a more effective and sustainable solution than simply increasing supply, in order to feel valued and respected as part of the strategy, they wanted to know what Anglian Water is prepared to do itself (on leaks, investment in infrastructure, efficiencies etc). Evidence from this and other research also highlights that in encouraging behaviour change, the company will need to address a widely held feeling of scepticism about the impact that individual customers can have, unless other customers do the same.

The online activities on water resource management took place in the Spring of 2018, with a group of customers who by this time had acquired a good deal of insight into water resource management issues. Even so, in the wider context of customers's lives, it was clear that these are **not priority issues for most** (especially those with younger families). Although customers understand that water is a scarce resource in the region, the lower rainfall is also something many said they enjoy. The research found that customers in the "comfortable and caring" segment and older customers (who remembered the effects of previous droughts) were more sensitive to the need to be cautious with the supply.

Several pieces of research and engagement suggest that **money and opportunities to save are likely to be key motivators** for encouraging customers to change their behaviour.

In the focus group with Hartlepool Water customers, participants were keen to see the company do more to help customers **save water and money**, for example by raising awareness of the benefits of being on a meter. Participants also suggested the development of a **water App** to help customers manage their own water use, and a **network of local "ambassadors"** who could go out into the community and raise awareness of services and support with saving,

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particularly among more vulnerable customers (something the company has now implemented).

The co-creation workshops also found that **customers were looking for ways to save**; and some groups were strongly focused on this. The workshops suggest that monetary incentives were important to everyone except families (who may feel there is little they can do to cut their usage further), even older and better-off groups.

Findings from the segmentation study, however, suggest that it will be important to appeal to a range of motivations, which may vary by customer segment. For example, in engaging with the 26% of the customer base that it identifies as "comfortable and caring" it will be important to recognise their altruistic tendencies, focus on the benefits to the community, and give clear information about initiatives, including transparency about where money is spent. In engaging the 11% of the population that the authors suggest are "careful budgeters", it will be helpful to focus on finances, recognise their budgeting expertise and offer them some practical tools to help. In appealing to the 28% of the customer base that the authors identify as "tech savvy" it will be important to emphasise opportunities to be an "early adopter" of new technology and approaches, and to use a "youthful tone" in communications.

In terms of **specific actions that customers are prepared to take**, evidence from voting that took place on the Anglian Water bus suggests that having **shorter showers** is a key way in which customers would be willing to reduce their water use (this was their top choice over options to collect rain water to water the garden and doing nothing further). Voting suggested that customers are interested in smart showers to help them to do this. In a Twitter poll conducted in support of the H2OMG water festival, showering less emerged as a less popular choice of the (different set of) options presented. Of the 2798 customers who took part, the **top choice was fitting water saving gadgets** (35%), followed by using a water butt in the garden (27%), re-using water to flush the toilet (21%), and showering less (17%). (Note, neither activities constituted robust quantitative research).

Participants in some of the future customer workshops suggested putting stickers in toilets and on or near taps could be helpful in **reminding people to save water**. They also felt that a system of **testing water devices** in the home on an annual basis to identify leaks and faults could be helpful. Participants in other future customer workshops advocated **imposing limits on water use** per household and/or fines for those using excessive water, as well as public education initiatives to encourage reduced use.

In the co-creation workshops, customers expressed the view that **targeting water conservation messages at the next generation** would be sensible; children and young people were often regarded as the "educators" of the rest of the family. Participants in the future customer workshops were also strongly supportive of this idea. As highlighted above, in the online community activities on smart water meters, customers identified that one of the key benefits of having a smart meter

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was providing data that could be used by parents to teach children about how much water is used in various household activities, and how much this costs.

Customers who took part in the online community trial also suggested that **home owners should be a priority group** to influence through public education, supporting previous findings (from PR14) that preventative behaviour for winter among household customers is completely influenced by home ownership.

The customer world focus groups found some "lack of identification" with ideas like Love Every Drop. However, this does not appear to be confirmed in other strands of activity. Participants at one of the future customer workshops recognised Love Every Drop from the TV weather, but hadn't heard of other Anglian Water campaigns. They felt that something "sensational" would need to be devised to grab customers' attention.

Across the six co-creation workshops participants came up with seven "big ideas" to communicate with customers and encourage behaviour change: reality TV shows or documentaries that show how people might cope in a possible future scenario in which there is a shortage of water (bringing this issue to life for schemes to encourage reductions in consumption through incentivisation or allowances and penalties (appealing to people's strong motivations to save money); competitions to save water between friends, communities, and schools (tapping into people's competitive spirit); school-based activities (as children were seen as educators of the rest of the family); community-based activities e.g. Anglian Water working with community hubs/groups to create local experiences on the theme of resilience or saving water (reflecting a desire on the part of some customers to engage in collective efforts to address challenges); promoting smart water meters (one of the most talked about ideas at the workshops); and providing customers with devices and simple tips/advice on how to save water at home. The online community activities focusing on smart water meters also appeared to confirm the importance of a competitive element in encouraging behaviour change. Customers in this research felt that having access to comparative information about other households' water use was important in spurring them on to make changes to consumption.

customers at the Hartlepool co-creation workshop came up with **broadly similar ideas** to customers at workshops held in other parts of the Anglian Water region. However, customers at this event felt that in developing campaigns to encourage behaviour change, it was **particularly important for Hartlepool Water to emphasise that it is a local company** and to try to show the impact of the issues on local people and places. For example, one of the "big ideas" participants had was to show what might happen to iconic local places if there was a lasting reduction in the water supply. Participants were also clear that they wanted Hartlepool Water to **partner with local businesses and facilities** (such as the local pool) to raise awareness.

In the online community trial, customers highlighted Anglian Water's **leisure** facilities as a great way to get the message out about water conservation.

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In addition to what might motivate different groups of customers to change their own behaviour, the online community trial seemed to reveal **different views about** how to change the behaviour of other stakeholders. For example, "tech savvies" were more likely to see Anglian Water operating as part of a complex network with opportunities to positively influence supplier and partner behaviour. In contrast, the "eco-economisers" tended to think that external pressure will be needed to encourage developers and landlords to change.

In this year's Community Perception survey (2017/18), 71% of household customers agreed with the statement "**Anglian Water promotes water efficiency**" (n=1310), reflecting similar results for the previous two years (both 69%). The proportion of Hartlepool Water customers saying this rose this year.

However, in the same survey, just 2% of customers demonstrated unprompted awareness of the company's water conservation work. When prompted, just 15% said they were aware of home visits to discuss water efficiency and install saving devices, and 7% said they were aware of community learning programmes in this area, again reflecting results from previous years of the survey. However, this year the proportion of Hartlepool Water and vulnerable customers who said they were aware of home visits and water saving devices increased.

During a series of meetings between Anglian Water staff and five major retailers, customers were asked whether they felt that **Anglian Water's wholesale tariffs promote water efficiency**. Only three of the five retailers answered this question and responses were mixed. One felt that this was unproven. Two felt that the Profile and Profile Plus tariffs were either too "punitive" or too "a blunt stick" (especially given that end-users in some sectors are not yet prioritising reduced consumption). Retailers were asked what else Anglian Water could do to support retail customers on water efficiency. Several retailers mentioned **working collaboratively to share good practice** on water efficiency and **maximise the impact of Anglian Water campaigns** (including by using retailers' websites to promote these). One retailer felt they already had this issue in hand, without further assistance from Anglian Water. Another wanted Anglian Water to **reduce wholesale charges where retailers can demonstrate a reduction in consumption**.

Although some of the participants in the future customer and co-creation workshops appeared to support allowances and penalties for excessive use, in the acceptability research on the Strategic Direction Statement, the goal of **80** litres per person per day was ranked least important of Anglian Waters's seven water and customer satisfaction goals (although it was still viewed as important by 68% of customers, where the highest ranking goal was judged important by 95%). Most of the objections to the seven goals centre on this goal, which was criticised by some customers as unfair rationing. Eleven percent of customers didn't understand something in the materials on the seven goals, and this confusion mostly related to the 80L per person per day goal (as well as to the goal on the circular economy). Ten per cent of customers felt some goals should

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be excluded; there was **greatest support for excluding the 80L goal** (57% of these customers thought this).

There was a consistent theme in terms of the elements that customers would like to see more of from Anglian Water in their Strategic Direction Statement, including more information on how the company will **support customer education and behaviour change**.

Customers in the online community activities that focused on drought resilience felt that **if householders were asked to change their behaviour, businesses should be asked to do the same** (as action by householders alone was unlikely to be effective).

In the consultation on Anglian Water's draft PR19 plan with customers in the online community, participants were introduced to the company's plans to help customers to reduce their water use through education programmes and help with water saving devices or equipment. Participants were told that Anglian Water's current target is to reach 132 litres per person per day by 2020, and that the new proposed target is a further reduction of five litres to 127 litres by 2025. They were told this target would be stretching as it relies on customers changing their behaviour (and, as Anglian Water hunts for leaks, it may be that some of what was thought to be leakage was actually water being used by customers). They were also told that these ambitions are underpinned by plans for advanced meter roll out. The consultation found that a five litres per customer per day reduction felt reasonable to participants and the focus on behaviour change was appealing. However, some participants pointed out that "one size doesn't fit all" and that some customers, for example those with larger families or with medical issues or disabilities, might find it harder to reduce their usage.

In the acceptability testing of the outline business plan, of the water measures tested, the **per capita consumption measure emerges as a fairly low priority**. Forty eight percent of household customers said this measure was of high importance to them (the top ranked measure was mains bursts on 82%, and the lowest was the AIM on 36%). Forty four percent of non-household customers said this was of high importance to them, making this the lowest ranking measure (the highest was mains bursts on 81%). **Most customers felt the per capita consumption targets in the plan were sufficiently stretching** (74% of all household and 82% of all non-household customers).

Raw water resources, Raw water distribution, Water treatment, Water distribution

Anglian Water and water conservation (includes leaks)

What we already know (as at June 2016)

Across evidence sources (both qualitative and quantitative) there is a strong message from customers that they want Anglian Water to take steps to conserve water, especially if customers are going to be asked to save more water themselves. For example, among respondents to the Second Stage Water Resources study, the response "I think water companies should do more to save water" was the second or joint second most popular response for both businesses

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and household customers (after "I do a lot to conserve water in my water use – I try not to be wasteful").

It is clear from the reviewed evidence that customers are very concerned about leaks. In the PR14 Willingness to Pay survey leaks were the second most frequently reported service incident (in the past 5 years) for both household and business respondents. Qualitative research suggests leakage is an "emblematic issue" for water companies (a sign that the company isn't "doing their bit"). Customers also regard leaks as wasteful of a precious natural resource. Across evidence streams, some customers also worry that if the company doesn't mend leaks this may be a disincentive to customers to save water.

In the Domestic Customer survey the reason that concerned the largest proportion of respondents (49%) was that a precious resource and the cost of treating it was being wasted. (Those in socio economic category B were more likely than those in groups C2, D and E to worry about this. High earners were also more likely to be concerned about this than lower earners.) Twenty six percent said that if water companies don't fix obvious leaks then no one else will do anything to save water. Twenty two percent said they were concerned about the impact on bills (this response was more common in socioeconomic group E rather than B or C1 and among lower earners). The Stated Preference studies indicate that a clear driver of the view on leakage across household and businesses is the perception that it leads to higher water bills.

Across evidence streams, customers place importance on **tackling leaks** more swiftly. The Second Stage Water Resources study suggests that business and household customers have a range of views about how to prioritise different types of leaks. More households and businesses felt that Anglian Water should **prioritise leaks based on volume** (rather than dealing with all leaks equally). However, a larger proportion of businesses (than households) held this view. Only a relatively small percentage of business and household customers thought that leaks affecting roads and homes should be prioritised above other types of leaks.

Across a few evidence streams there was recognition that there will be some leakage from pipes. For example, in the Second Stage Water Resources study, 34% of household customers and 41% of business customers recognised this, though they felt it should be managed to a reasonable level.

Evidence from multiple qualitative sources indicates that tackling leaks is a **priority area for further investment**. For example, participants at the deliberative customer events prioritised action on this issue ahead of improvements to the environment or customer service (and considered further investment was **still important even when the economic level of leakage was explained** to them). The exception to this is evidence from the future customer workshops; some young people did not seem to regard this as a priority.

Evidence from the Domestic Customer survey confirms that customers would like Anglian Water to do more in this area. In the investment simulator, fixing leaks was

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the top priority for additional investment. Sixty three percent of respondents chose to increase spend in this area from the pre-set level.

The Voice of the Customer survey indicates that one of the policies household customers do not like is the policy on 'leakage allowances'; customers want access to multiple leakage allowances for lost water.

In the Acceptability research, the element of the **proposed plan concerning** leaks was considered Acceptable by over 90% of all customer groups (with the exception of vulnerable customers). However, more respondents rated the leakage proposals as unacceptable (177 people) than any other individual element of the plan. The most commonly cited reasons for objection were that: more needs to be done to reduce leakage/waste (35%); some water leaks take too long to mend (19%); targets need to be lower (19%); 172 million litres a day is far too high (18%); and there should be zero tolerance on leakage (5%).

What's emerging (Autumn 2016 onwards)

Multiple sources of evidence in this wave of research and engagement confirm that customers are very concerned about leakage, and regard this as their key priority for improvement. Leakage is regarded as an unnecessary waste of a precious resource. Alongside changing weather patterns, it is also seen a key reason for the region's water supply becoming depleted.

Results from the main online community trial, and the online activities focused on drought resilience and water resource management, confirm that it is **important to customers that Anglian Water does its bit to conserve water**, including by investing in **prompt restoration of leaks**. In the online community activities focused on drought, discussion of severe water restrictions made customers **question whether Anglian Water was doing everything it can to save water**. This research also found that **acceptance of a price rise** to boost resilience was dependent on Anglian Water conserving water itself, as well as helping customers to save water and investing in supply-side measures.

The analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that leak-focused content performed strongly against the metrics used in the study (it was ranked second as a topic in terms of volume and reach, and third in terms of engagement). Content about leaks was found to have featured in 732 conversations during the study period, with a potential reach of 162K people. More than a third of content consisted of interactions with Anglian Water's Twitter account flagging up problems. Complaints about slow responses to leaks contributed to the high penetration of negative sentiment. Around 7% of discussions addressed innovations in leak detection, including the use of drones. Criticism from specialist bloggers of the company's use of dowsing rods to detect leaks also triggered a wider media response.

Heavy use of Twitter to flag leaks may explain why, of the 6591 **written complaints** received by Anglian Water between 1st April 2017-31st March 2018, just 3% (or 199) concerned leakage.

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At the "magnet maze" stall at the H2OMG event, customers were asked for their views on eight deficit reduction measures and asked to pick their top three. **Tackling leakage was the most popular choice**, picked by 22% of customers. However, in one of the Twitter polls held in support of the H2OMG event, of the 1684 customers who took part, just 24% voted to reduce leaks (with an increase in the bill), 31% voted to keep bills down (with a rise in leaks), and 45% voted to keep things as they are. (Note, neither activities constitute robust quantitative research).

As highlighted above, in the second Community Research study on vulnerability (which explored customer reactions to Anglian Water's draft PR19 business plan), customers were introduced to **three options for investment**, **with associated bill impacts**. Assuming an average household bill of £412 in 2019-2020, with efficiency savings of £16, the options were: minimal additional investment in climate change and environmental improvement (resulting in likely annual bills of £455 in 2025, including inflation); additional investment in climate change *or* environmental improvement (leading to likely annual bills of £466 in 2025, including inflation); or additional investment in climate change *and* environmental improvement (leading to likely annual bills of £478 in 2025, including inflation). For each option, customers were asked to factor in a posible £20 reward or penalty (resulting in a corresponding decrease or increase in the bill) for reducing leakage, at the cost of £4 per household per year.

The majority of participants preferred the second option (additional investment in either climate change *or* environmental improvement). The majority also **supported the £4 charge to support improvements in leakage**, as they didn't want water going to waste and felt the additional cost was minimal.

In Hartlepool, customers were presented with a different bill profile, with smaller projected bill increases (partly due to Hartlepool Water sourcing most of its water from boreholes). These assumed an average bill in 2019-20 of £356, with efficiency savings of £11. The bill profiles were then (including inflation): option one £381; option two £387; and option three £396. The same potential reward/penalty applied for performance on leakage. The research found that low income participants in Hartlepool were more open to the options involving proportionately greater investment. However, after agreeing to pay for option three, some customers felt it was a bit much for Anglian Water to ask them for an additional £4 to pay for leakage improvements. There was least support for this in the Hartlepool Water focus group.

As part of a series of conversations with Anglian Water staff, retail customers were asked if they felt Anglian Water should set themselves a **target** to reduce leakage still further/continue to be the leading performer in the industry in this respect. All (five) retailers agreed the company should do this, although one felt this decision should be subject to an analysis of the costs involved. One retailer felt Anglian Water should go futher than this and also share best practice with other wholesalers.

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In the Community Perception Study, customers were asked about the measures that would help convince them that Anglian Water is a company that cares about the communities it serves. This year, just 4% said **repairing leaks quicker/more efficiently** would improve their opinions of the company, however this was a significantly higher figure than in previous years of the survey (2% in both previous years).

The most robust data on **customers' experience of leakage, the importance they place on it and their willingness to pay for improvements** comes from the Main Stage Willingness to Pay survey and the Water Resources Second Stage study.

As highlighted elsewhere, the Willingness to Pay survey found that the majority of household customers have not experienced any problems with their water or sewerage services in the last five years (72%). For those that had, an issue with the water supply was the most commonly experienced problem (15%, n=1353, all subsamples, DCE and DWS surveys). A smaller proportion of non-household customers had experienced no problems with their service in the past five years (55%). However, the same proportion of these customers had experienced a problem with their water service (15%, n=500, all subsamples, DCE survey).

Of the 220 household respondents who had experienced a problem with their water service, the most commonly cited problems were concerns about the aesthetic quality of tap water or hardness (53% or 116 respondents for both). Nineteen percent had experienced a leak in the street. (Combined and water only subsamples, DCE and BWS surveys). For the 81 non-household customers who had experienced a problem with their water service, concerns about the aesthetics of water were also the most common issue (75%, 61 respondents). Twenty two percent of these respondents had experienced a leak in the street.

Analysis of responses to the Water Resources Second Stage research "package" question also found that, for household customers, visible leaks near or outside the home were **one of the more recently experienced problems** (12% had experienced this in the past year, while 21% had experienced low pressure, and 2% had received a boil notice). The figure was the same for non-household customers.

Results from the (DCE) Willingness to Pay survey for water services suggest that most household customers are broadly satisfied with Anglian Water's performance for leakage, with 75% saying performance was either satisfactory or somewhat satisfactory. (Rates of satisfaction for other attributes were slightly higher, with discolouration on 79%, rota cuts on 78%, and unplanned interruptions on 76%, n=550, combined and water only subsamples). However, the BWS version of the household survey found that leakage was considered by most respondents to be the worst aspect of the water service (only 13% felt it was the best and 41% felt it was the worst, n=301, combined sample). As customers had been presented with some comparative information on Anglian Water's

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performance before answering this question, and as this showed Anglian Water is a top performer for leakage, the authors suggest that **customers must have more nuanced views on company performance than simply how a company ranks relative to its peers**.

The (DCE) survey revealed that most non-household customers were also satisfied with performance for leakage, however satisfaction was much lower than for household customers, at 57%. (Rates of satisfaction with discolouration, at 67%, rota cuts, at 58%, and unplanned interruptions, at 58%, were also lower, n=253, combined and water only subsamples).

Reflecting generally positive views of Anglian Water's performance, most household respondents opted to **maintain current performance levels** for water services (between 60%-72% depending on the attribute). For those that indicated that service levels should improve, the **priority was reducing leakage** (32%, n=550, combined and water only subsamples, DCE survey). Non-household customers also viewed **leakage as the priority for improvement** in relation to water services, with 42% opting to improve performance and just 41% opting to maintain it (n=253, combined and water only subsamples).

In selecting a package of improvements relating to the water service, the Willingness to Pay (DCE) choice task indicates that household customers gave the greatest weight to leakage (26%) and change in the bill (24%, n=551). Nonhousehold customers also placed the greatest weight on leakage (29%) followed by severe water restrictions (22%), with less weight given to change in the bill (19%, n=253).

Disaggregated results for Hartlepool Water customers from the Main Stage Willingness to Pay survey suggest that there is very little difference in attitudes among these customers in terms of the importance of various water service attributes. Leakage was also the area that the greatest proportion of Hartlepool Water respondents identified for improvement (16%). Analysis indicates that the level of leakage and change in the bill were also the most important aspects of the choice task for Hartlepool Water respondents. This is despite the fact that in the focus group held with customers of Hartlepool Water, participants praised the company for being prompt to resolve leaks and respond to other problems with the water supply.

In the Water Resources Second Stage research "package" question, household respondents allocated the greatest percentage of the bill impact to dealing with complaints about the aesthetics of tap water, followed by leakage, and interruptions. Non-household customers allocated the highest percentages to leakage, and then (depending on the version of the survey) to security of supply (drought restrictions), and interruptions.

In the options survey for the Water Resources Second Stage research, prior to completing the main choice task, customers were introduced to a list of demand and supply-side water resource options and asked to choose their top

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three options and the options that should not be used. Among household and non-household customers, leakage reduction was the option most likely to be selected as one of the top options and least likely to be selected as an option that should not be used. When asked to explain their choices, both types of customers emphasised that they were focusing on not wasting a precious resource, taking a practical and sensible course of action, and making the most of existing water resources.

Results from the main choice task in the options survey indicate that the strongest preference for both household and non-household customers (from the demand and supply-side options presented) was for leakage reduction and storing water underground. The results suggest that among household customers, those from the highest socio-economic grade (AB) have a higher preference for leakage reduction compared to other groups (this was the only difference that was statistically significant at p<0.05).

In the post-survey validation focus groups for the Water Resources study, there was no surprise among customers to hear that leakage was ranked highly, as this was seen to represent an **unnecessary waste of water**. (These findings were consistent with messages from the testing phase of the survey.) In the groups, customers also identified on-going leakage, as well as changing weather patterns, as **a key reason for the region's water supply becoming depleted**.

In the main online community trial, customers felt the company's **commitment to reducing leakage should take pride of place** in communications from Anglian Water, as it **should be the company's priority.** However, customers also felt the "0%" **target sounded very ambitious**; without further detail on what would be involved in delivering this it felt unachievable to some customers.

In the acceptability research on the Strategic Direction Statement, leakage was one of the areas customers said they would like to see given more prominence in the ten outcomes. Of Anglian Water's seven water quality and customer satisfaction goals, zero leakage and bursts was ranked 3rd of 7 (seen as important by 92% of customers, where the highest ranked goal was viewed as important by 95% of customers, and lowest by 68%). Ten percent of customers thought one of the seven goals should be excluded. There was least support for excluding the goal on zero leakage and bursts (12% of these customers).

The consultation feedback on Anglian Water's draft PR19 plan with customers from the online community found that, overall, participants supported the plan. Customers were particularly reassured that leaks and bursts were being addressed. Together with sewer flooding, these were participants' top priorities, as they were the issues thought to impact most on customers in terms of disruption and cost.

Participants were told that **Anglian Water is currently the best company in the UK for leakage**. This means that the usual ways of setting a performance commitment level are less relevant (targets based on historic or comparative performance or cost-benefit analysis would not be stretching enough). Participants were told that Anglian Water is proposing to set a performance commitment based

Relevant To Business Portfolio	Topic Area & Customer Evidence
	on a 15% reduction in the performance of the top performing quartile of water companies in the UK. The current regulatory target is 192ML/day by 2020. The company also has its own target of 172ML/day by 2020. The company's new proposed stretch performance commitment is 166ML/day by 2025, with a "deadband" at the level of leakage Anglian Water achieves by 2020. The target is underpinned by plans for smart meter roll-out. The consultation found that this ambition "delights" customers and taps into their expectations in this area. Anglian Water's industry leading performance is also considered something to be proud of. However, some customers want to know more about how smart meters help to detect leaks. For some, comparing performance to others feels like an excuse not to be ambitious; they think Anglian Water should continue to focus on this area regardless of what others are doing.
	Confirming the results of other research, in the consultation exercise, a majority of participants supported the proposed additional investment in leakage. The notion of Anglian Water investing more to continue to be a leader in this area felt motivating. However, participants didn't want to see their bills continue to rise simply because the company wants to "be the best". The proposal was supported so long as the additional investment was around £4 per household per year. A potential rise of £20 felt too high.
	The acceptability research on the outline business plan confirmed yet again that leakage and bursts are key customer priorities. When asked to prioritise between six areas that spanned water and waste services (mains bursts, sewer collapses, treatment works and recycling centre compliance, external sewer flooding, unplanned outages and low pressure), both household and non-household customers ranked water mains bursts of greatest importance (average score was 4.85 for households and 5.20 for non-households, on a scale of one-six, where six is most important). Of the water measures in the plan, mains bursts also emerged as the most important measure (judged to be of high importance by 82% of household and 81% of non-household customers), followed by leakage (68% and 79%), and reactive mains bursts (65% and 71%). Most customers felt the targets in this area were sufficiently stretching, however, targets for leakage were regarded as stretching by more customers (80% of household and 83% of non-household customers) than mains bursts (65% and 69%) and reactive mains bursts (69% and 76%). Reactive bursts were ranked 8 th and mains bursts 10 th of 12 measures, in terms of perceived stretch by households. They were ranked 10 th and 12 th by non-household customers. Household customers who understood the measures, were significantly more likely than non-household customers to say that they didn't know if targets for mains bursts and reactive bursts were sufficiently stretching.
Raw water	Alternative sources of water
resources, Raw water distribution, Water	What we already know (as at June 2016) Some participants in qualitative research and in the consultation expressed concern about the use of high quality water for purposes other than drinking, which

Water treatment,

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Water distribution

was seen as wasteful. There was interest in Anglian Water investigating a **dual supply** of potable and non-potable water.

Some participants in qualitative research and engagement activities expressed support for **building new reservoirs** and continuing maintenance of existing ones.

In relation to the range of water sources and management options available, the Second Stage Water Resources study suggests households are most familiar with demand management options (such as metering and water efficiency), followed by leakage detection and reduction. Households are much less familiar with desalination, the transfer of water and water re-use. The majority of business respondents have heard of all the options, with demand management and leakage again the most familiar, and desalination and water re-use the least familiar.

(Limited) evidence from qualitative research and engagement activities suggests that some customers and stakeholders are supportive of greater collaboration between water companies and **transfer of water from wetter regions of the country**. However, there is also recognition of, and some concern about, the potential impact on the industry's carbon footprint. Some participants also support desalination, or would like to know more about whether this is a feasible option for increasing supply in future.

In the Second Stage Water Resources research customers prioritised further leakage detection and other water efficiency methods as the most important approaches for managing water supplies in future. Alternative sources of water (abstraction, re-use, building new reservoirs and desalination) were all considered less preferable. However, if the environmental impact of river abstraction and desalination are dealt with, these are acceptable water sources to customers. Given that new sources are only permitted where there is no environmental impact, the Second Stage Water Resources study found all water sources are equally weighted (when the carbon impact is excluded for all options).

What's emerging (Autumn 2016 onwards)

Various strands of research and engagement suggest that **increasing water storage resonates strongly** with customers. For example, in the online community activities focused on drought, building more reservoirs and acquifers was regarded by customers as a "**logical extension**" of current water shortage **strategies**. Acquifers were thought to have the added benefit of lower water loss through evaporation, and reservoirs of being valuable "leisure spots".

In one of the Twitter polls held in support of the H2OMG water festival, customers were asked if they would be **happy to see a reservoir built in their area**. Of the 2639 customers who took part, 66% answered yes, 16% answered no, and 18% said they were not sure. However, at the "magnet maze" stall at the H2OMG event, building more underground storage and more reservoirs were ranked sixth and

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seventh of eight options for tackling the deficit. (Note, neither polls constitute robust quantitative research).

In the main online community trial, customers expressed an interest in Anglian Water exploring a range of other ways of increasing water supplies, including through **desalination**. In the online community activities on drought, however, while desalination was regarded as an "obvious solution" to water shortages, it was also felt to be very costly. Participants at one of the future customer workshops suggested Anglian Water should be trying to find **a "green" way of desalinating seawater**, as well as building new reservoirs and encouraging reduced use.

In the online community trial customers were also interested in the company pursuing partnerships with "wetter" counties, such as Cumbria, to **share water supplies**. However, in the online community activities on drought, although customers recognised that contributing to a **national grid** would help to address the large disparities in availability of water across the UK, this was perceived to be impractical given the need for Government involvement and collaboration between water companies. Participants at one of the future customer workshops also recognised that **water transfer** might be expensive, but felt it ought to be explored as an option for the the future. However, customers who took part in the poll at the "magnet maze" stall at the H2OMG event also expressed **negative views about water transfer**. This was the least popular of eight options for tackling the water deficit, with just 4% of the 733 customers who took part choosing this as one of their top three options. (However, note, this was not robust quantitatve research.)

The segmentation research found that across the whole customer sample, 77% were positive about transferring water to other areas of the country where water was scarce (answering 6-10, where 10 is strongly agree), while 42.8% of customers strongly agreed (answering 9-10). However, there were some large differences in opinion about water transfer across the customer base. For example, 66.1% of careful budgeters (11% of the whole customer base) strongly agreed to this, while only 2.1% of "protective provincials" (9% of the whole customer base) felt the same.

In the online community trial, overall, **reducing water use and loss was seen as less disruptive and costly, and more achievable,** than supply-side measures. (However, taking steps to increase supply was seen as potentially more effective and reliable, and had the added benefit of modernising the infrastructure).

The most robust source of data on alternative sources of water comes from the Water Resources Second Stage research. As highlighted above, when customers were initially introduced to a list of demand and supply-side water resource measures in the options survey, leakage reduction was the measure most likely to be selected as one of the top options and least likely to be selected as an option that should not be used (by both types of customers). The next set of options most likely to be included in household respondents' top three choices included recycling/re-using treated waste water and storing water underground (as well as providing water saving devices and incentives and

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education to save water). It is notable, however, that water recycling/re-use was also selected by a high percentage of respondents as an option that should not be used. Similar results were found for non-household customers, with recycling/re-using treated waste water, compulsory metering and providing water saving devices all popular choices, after leakage. However, recycling/re-using treated waste water was viewed more favourably by non-household respondents, with this measure less likely to be selected as an option that should not be used. Desalination was the measure most likely to be selected as an option that should not be used by both household and non-household customers.

Results from the main choice task in the Water Resources options survey indicate that the strongest preference for both household and non-household customers was for leakage reduction and storing water underground. Households also demonstrated strong preferences for extending existing reservoirs, although this preference was weaker for non-household respondents. Transferring water and desalination were viewed as the least popular options by both types of customer.

Overall, results from the Water Resources options survey show that, with a couple of exceptions, customers generally prioritise demand options over new water resource options. They prefer interventions that avoid perceived wastage (leakage reduction, recycling/re-using treated waste water) and promote efficiency (water saving devices), as well as a couple of new water resource options (storing water underground and extending existing reservoirs). Results also show that customers prefer options that are more reliable, and that all options are preferable to having more restrictions imposed.

In the post-survey validation focus groups for the Water Resources study, customers were presented with three further alternative water resource options, river management, canal transfer, and network management, and asked to rank these alongside the 12 options that had been considered in the survey. Canal transfer and river restoration were popular choices (ranked third and fourth after leakage and storing water), as it was felt that the infrastructure was already there to support them. Network management was ranked much lower, (fourth from the bottom), because of the damage customers felt might be caused to the environment, as well as other negative societal impacts, such as traffic jams.

These findings on network management appear to conflict somewhat with findings from the online community trial, where customers reacted positively to Anglian Water's commitments to **building more connected networks**. Customers in the online community regarded it as reassuring that the company is striving to constantly update and streamline disruption processes to maintain a consistent service. However, quotes from those who took part suggest that customers would like **more detail** on how Anglian Water will achieve this in practice, including an indication of targets and timescales.

In addition to the Water Resources study, various other strands of research and engagement suggest that customers support the notion of recycling and re-

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use. For example, in the main online community trial, customers were keen for Anglian Water to conduct more research on techniques for **converting "grey" water**. Participants felt that in the homes of the future (in 2050), water recycling would be the norm with, for example, use of grey water for gardens and water butts for storage. Customers in some segments seemed to be particularly interested in these ideas, especially the "eco-economisers", who are keen to live a more sustainable lifestyle. In one of the future customer workshops, participants also felt strongly that **drinking quality water should not be used to flush toilets**. They felt that all new homes should have **rain flush toilets** instead.

As part of a series of conversations with Anglian Water staff, retail customers were asked if they would **support the use of alternative sources of water**, such as re-use initiatives. Most said they would support such initiatives, however one said they would only do so if this made economic sense. Another said they would be more supportive of green-water recycling and re-use of water for arable; they felt that some customers were sceptical of grey-water recycling. Another felt that Anglian Water should explore off-grid solutions and measures that encourage cross-business collaboration where there are possible synergies – e.g. geographical clusters.

The online community activities focused on alternative sources of water found that customers already buy-in to "green" water as a concept. Participants expected Anglian Water to process water to different levels/standards, and were surprised they are not doing so already. Participants perceived a range of benefits from use of green water, including a reduction in the company's environmental impact (from reduced energy use, and use of fewer chemicals), and less wastage of drinking grade water. Customers had some questions and concerns about the quality and safety of green water (including the implications for health if water is consumed by children and animals, and the risks of contamination from bacterial growth in water treated to a lower standard). However, the research found that these concerns were not sufficient to put customers off green water.

While customers supported the concept of green water, the research found that the practicalities of installing it, and the costs associated with this, are regarded as significant barriers to overcome. Installing green water for every household in the UK felt **hugely costly and disruptive** to customers, and they questioned who will foot the bill for this.

As highlighted above, customers felt that a **focus on new builds was the logical place to start in implementing green water**. Customers were generally supportive of the idea of a **joint investment partnership** to share costs with developers. This helped to reassure customers that they won't have to pay, and positioned Anglian Water as an enabler and influencer. However, customers also expressed concerns that developers may eventually pass on the costs to customers through increased house prices for new builds. At some point in the future, customers expect government and developers to step in to legislate for and incentivise green water, to reduce the cost implications for customers.

Relevant To Business Portfolio	Topic Area & Customer Evidence
	Participants felt that customers would need to be incentivised to retroactively install green water in existing properties. They felt support would be required upfront to alleviate the costs of installation (e.g. through loans, Anglian Water negotiating lower rates from particular installers). In addition, customers felt that on-going incentives would be required (e.g. lower/fixed tariffs for green water, reduced overall tariffs if households used green water, and/or rebates for customers using their own green water).
	Participants expected green water to be cheaper than drinking grade water as it has required less processing. However, they also cautioned that if it is significantly cheaper, customers may be less inclined to conserve it. They questioned whether green water will be metered to encourage judicious use.
	Participants also felt that green water needed careful branding to attract customer support. They suggested that a name change might be required as "green" water has some negative connotations (e.g. of algae growth, or stagnant or dirty water).
	In a recent poll on Facebook (November 2017), customers were asked if they felt it would be a good idea if all new homes in the future (2050) had two supplies of water , one for drinking and washing and the other, green water, for flushing the toilet and watering the garden. A similar (but not identical) question was posed on Twitter. Of the 777 votes cast on Facebook, 82% felt that green water was a "great idea" . Of the 139 votes cast on Twitter 86% felt the same. (Note, this was not robust quantitative research that provides an accurate sense of the distribution of views in the population).
Sewerage	Waste water
collection, Water	What we already know (as at June 2016)
recycling	There is slightly more limited coverage of the wastewater (than the water) service in the reviewed evidence streams. Evidence from some qualitative research and from the deliberative customer events suggests that some customers regard wastewater as an ' invisible ' service that they don't think about very much. The FOG research suggests that changing the language used to describe the service (from a wastewater to a recycling service) may help it achieve greater prominence in people's minds.
	Nevertheless, evidence from several quantitative and qualitative sources indicates generally high levels of satisfaction with the wastewater and environmental services among both household and business customers. There were more complaints about the wastewater service than the water service this year (with most relating to external flooding and sewer flooding/condition of sewers). However, the Ofwat SIM Qualitative Survey indicates that, year to date, Anglian Water is 2 nd in the industry when dealing with contacts about wastewater.

Among household customers, **Cambridge Water** respondents to the PR14 Willingness to Pay survey, reported the **highest level of satisfaction with** the wastewater and environmental service (on most dimensions). Both



household and business customers (from all areas) were least satisfied with the number of incidents where untreated sewage pollutes rivers.

Participants in qualitative research and engagement activities mentioned a few isolated cases of **bad smells from sewer treatment** works; however this does not seem to be a major problem or one that these customers believe is an important improvement priority. Just over three quarters of household respondents to the PR14 Willingness to Pay survey, indicated that they were happy with the current level of service in this respect; similar proportions were found for non household customers. These results were confirmed in the Consumer Council for Water Annual Tracker survey.

Some **business customers** involved in qualitative research felt their wastewater service was **quite expensive** and wanted to see more savings in their bill when they recycled 'grey' water.

Household customers who took part in the deliberative events found it difficult to comment on questions about the appropriate balance of future investment in this area (expanding underground storage capacity to deal with wastewater or keeping water out of the sewer system in the first place). As highlighted above, household and business customers who responded to the Second Stage Flooding survey regarded most options for reducing flood risk as effective. However, they gave the lowest score to stopping rainfall going into sewers (though 75% of household customers and 71% of business customers thought that making hard surfaces permeable would be quite or very effective).

Opinion was divided among stakeholders at the Joint Panel event about how best to respond to uncertainty about the **EU Water Framework Directive**. Participants were keen for Anglian Water to continue to monitor the situation and seek expert advice on the best way to proceed. Discussing some specific options concerning the resilience of sewer treatment works, stakeholders suggested that the company assess plans on a case by case basis, rather than investing in ensuring that all population centres of a certain size have a second treatment works.

The Customer Education Strategy for Wastewater research finds that there is great scope for better education of the public around wastewater. Many household customers who participated in qualitative research and engagement expressed interest in what gets flushed down the toilet and into the sewer system. The Drought/Water Efficiency research and the Consumer Council for Water Annual Tracker survey found evidence of a decline in awareness, attitudes and behaviours in relation to blockages in wastewater pipes or drains, although the Annual Tracker Survey 2014 saw a change in this trend as awareness picked up from 2014 to 2013. The Customer Education Strategy for Wastewater research also found that contradictory messaging provided by manufacturers is recognised by the industry as the key barrier to successful education.

However, in the consultation there were many mentions of the **FOG campaign** and considerable support for this.

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Topic Area & Customer Evidence

What's emerging (Autumn 2016 onwards)

Recent evidence on the waste service suggests that service problems are infrequent. Satisfaction is generally high, although it appears to be slightly lower than for the water service, and lower among non-household than household customers. Performance on sewer flooding inside homes and bathing water quality at beaches are priorities for improvement for both types of customer. However, overall, improvements in waste services appear to be less important in customers' decisions to support a package of service changes than improvements to the water service.

As highlighted elsewhere, the Willingness to Pay survey found that the majority of household customers had not experienced any problems with their water or sewerage services in the last five years (72%). For those that had, an issue with the water supply was the most commonly experienced problem (15%). Just 8% of household customers had experienced a problem with their sewerage services in the same period (n=1353, all subsamples, DCE and DWS surveys). A smaller proportion of non-household customers had experienced no problems with their service in the past five years (55%). In contrast to household customers, problems with the sewerage service (14%) were as common as those with the water service (15%, n=500, all subsamples, DCE survey).

Overall, 113 household respondents cited sewerage service issues. Of those, sewer flooding inside the home was the most commonly experienced problem (66%, or 75 respondents), followed by a blocked drain on or near their property (49%, 55 respondents), and odour from sewage treatment works (39%, 44 respondents). Twenty percent of these customers had experienced external sewage flooding in public places near a property and 15% had experienced it in a garden or drive. Among the 74 non-household customers who had experienced problems with their sewerage services, a blocked drain was the most commonly experienced problem (55%, 41 respondents), followed by sewer flooding in public places (26%, 19 respondents), and inability to flush a toilet (22%, 16 respondents). Twenty percent of these customers had experienced a problem with sewer flooding inside premises and 18% outside.

Eindings from the Water Resources Second Stage survey "package" exercise also found that, in the majority of cases, household customers had never experienced any service issues. Odour from sewerage treatment works was one of the most recently experienced issues (12% had experienced this in the past year, while 21% had experienced low pressure and 2% received a boil notice). A similar percentage of non household customers had experienced odour problems this in the past year (11%). Of the 10 service issues explored as part of the "package" element of the survey, sewer flooding affecting homes, gardens, business premises or nearby public areas was the issue that had been experienced the least by both types of customer (joint bottom with boil notices for non-household customers). However, 15% of household customers and

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Topic Area & Customer Evidence

30% of busineses reported experiencing this problem at some point in the past.

In the (DCE) Willingness to Pay survey, household customers were generally positive about Anglian Water's performance in relation to sewerage services, with around two in three household customers (68% on average) rating this as either 'satisfactory' or 'somewhat satisfactory'. Compared to water services, neutral responses were slightly higher for sewerage services (between 16%-18%). However, on average, just 9% felt performance was unsatisfactory, n=558, combined and sewerage only subsamples). In the BWS version of the household survey, performance for internal sewer flooding was rated the best aspect of the sewerage service by a majority of respondents (57%), followed by odour from sewerage treatment (24%). External sewer flooding was rated worst by the majority of respondents (52% rated this as worst and only 19% as best, n=301, combined subsamples). A slightly lower percentage (55%) of non-household customers were satisfied with the sewerage service, n=349, combined and sewerage only subsamples).

The latest set of figures from the CCWater Water Matters research (from 2017/18), confirms generally high rates of satisfaction with the sewerage service. Eighty-nine percent of Anglian Water customers said they were satisfied overall (n=369). The range for all water and sewerage companies was 82%-92% (with a weighted average of 87%). Figures suggest an increase in satisfaction with the sewerage service over the past seven years.

Data from the same survey for 2017/18 found that 78% of Anglian Water customers were **satisfied with company actions to reduce smells** from sewerage treatment (n=293). The range for all combined companies was 70%-82% (with a weighted average of 77%). Eighty-three percent of Anglian Water customers were **satisfied with the maintenance of pipes and treatment works** (n=291). The range was 73%-87% (the average was 81%). Compared to other combined companies, Anglian Water performed particularly strongly on satisfaction with its **cleaning of waste before releasing this back into the environment**. Eighty-four percent of customers were **satisfied this aspect of the service** (n=267). The range was 67%-85% (with an average of 79%). These results for Anglian Water are a **statistically significant increase over 2016/17 results of 75%.** Eighty-two percent of Anglian Water customers were **satisfied with company actions to minimise sewer flooding** (n=290). The range for all combined companies was 67%-85% (the average was 79%).

Reflecting generally positive views of Anglian Water's performance, most household respondents to the Willingness to Pay survey opted to maintain current performance levels for sewerage services (between 59%-65%), with approximately one in three wanting to see better performance for internal sewer flooding (33%), bathing water quality (32%) and external sewer flooding (31%), and a smaller proportion (25%) wanting to see improvements to odour from treatment plants (n=558, combined and sewerage only subsamples, DCE survey). Roughly equal proportions of non-household customers opted to maintain (48%-

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56%) and improve sewerage service levels (31%-38%), with sewer flooding rated marginally higher as a priority for improvement than other issues (38% external, 36% internal, n=349, combined and sewerage only subsamples).

In selecting a package of improvements to sewerage services, household customers placed the greatest weight on sewer flooding inside properties (27%) and bathing water quality at beaches (22%, n=558). These two areas were also given the greatest weight by non-household customers (though a more equal 25% for both attributes, n=349).

As part of the "package" exercise in the Water Resources Second Stage study, customers were asked for their **reasons for choosing the improved package**. Key reasons were that the bill increase was affordable, as well as a desire to protect the environment and deliver improvements, particularly in **water services**, which appear to be a more important driver than improvements in the waste **service**.

As highlighted above, in the initial questions in the Water Resources options survey, recycling/re-using treated waste water featured strongly as one of the more popular water resource options for both types of customer (after leakage). However, this option was also selected by a high percentage of household respondents as an option that should not be used. It was viewed more favourably by non-household respondents, who were less likely to select it as an option that should not be used. In one of the future customer workshops, when asked what Anglian Water should be doing to respond to population growth, some of the participants also felt that it should be re-using waste water and sewerage.

In the segmentation research, 79.6% of customers across the whole customer base strongly agreed that it is unacceptable to flush household/food waste down the toilet (answering 9 or 10, where 10 is strongly agree). However, there were some clear differences between customers. For example, "tech savvies" (28% of the customer base) were less likely to strongly agree with the statement (57.6%), while "protective provincials" (9% of the customer base) were more likely to strongly agree (92.9%).

The popularity of the "beat the bog" stall at the H2OMG event suggests there is a great deal of interest in the topic of what gets flushed down the toilet. The fact that 90% of (the 823) customers who answered a question on the stall about changing their behaviour pledged to do so appears to confirm customer concern about this issue. (However, note, this was not robust quantitative research).

In the online activities specifically focused on **sewerage rehabilitation**, sewerage problems were seen not just as the product of a deteriorating network; **customers spontaneously identified other people's behaviours as partly responsible for blockages** (in particular the flushing of baby wipes, cooking grease/fat and sanitary products). Across various strands of research and engagement there is interest in **Anglian Water doing more to educate customers** about the

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implications for the network of flushing certain products, and the costs involved in carrying out associated works.

Customers who took part in the online community trial regarded the **company's** plans to reduce its negative impact on the environment as "indisputably positive" (including keeping surface water out of sewers to prevent overflows and pollution, and investing in the sewerage network to keep pace with a growing population). These plans were thought to demonstrate that Anglian Water is thinking ahead and is willing to work with others.

As highlighted above, in the online community activities on sewerage rehabilitation, the majority of (the 20) customers who took part had experienced some form of pipe-related disruption. Service cuts felt like the most severe type of disruption, and customers expected these to only last a few hours. However, although inconvenient, customers felt they are generally well managed. Noise was regarded as an inevitable consequence of work being conducted, and was not regarded as a major issue, as it usually occurs in working hours. However, road closures and traffic disruption were regarded as the worst side-effects of work taking place (particularly for those who rely on public transport, and for people with disabilities).

The research found that how works and disruption are managed affects levels of customer frustration. Customers feel least frustrated when: they've been informed well ahead of work starting, allowing them to plan accordingly; they've been kept updated of any changes to timings; and when traffic continues to flow, even if major junctions are closed. Customers feel most frustrated when: they feel that a road closure was not planned in advance; and when closures go on for weeks, without a clear end date, and with little visibility of work actually taking place.

The question of **how best to schedule works** so as to minimise disruption felt complicated to customers. Generally, they **preferred work to be carried out in intensive periods**. In comparison to shorter bursts of activity over a longer period, customers felt such an approach was easier to communicate and more efficient and cost-effective. However, customers recognised that the appropriateness of the approach would depend on the circumstances. For example, it may be less disruptive to spread works over a longer period of time in some high access areas (such as outside a school).

Customers made a number of **suggestions for improving communications** about pipe-related disruption, including: more tailored information (with just the essential facts provided to all and more information available if people are interested); better use of on street signage (including digital signs that can be updated); and more information on why workers may not be on site.

Despite concerns about pipe-related disruption, the valuation research on flooding and roadworks found that the **wellbeing impact per incident for flooding is considerably higher than for roadworks.** (The wellbeing impact value for the aggregate "all types of flooding" category was more than 10 times the average value for roadwork incidents). The research team suggest that while roadworks

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represent a disturbance to people's quality of life that is more frequent in nature, roadworks have less impact per incident. In contrast, flooding is less frequent but has more impact when it occurs. The valuation research also found that **flooding** and roadworks values per incident were higher in urban than rural areas. This is largely because there tend to be a significantly higher number of households living nearby to an incident in urban areas, due to greater population density.

In the online activities on sewerage rehabilitation, reactions to the sewerage rehabilitation strategy were positive. Sharing the strategy: helped customers to appreciate the scale of the challenge and the work involved in maintaining the sewerage system; created an impression of Anglian Water as a proactive company that is investing in network improvement; and helped customers to recognise that Anglian Water is actively trying to minimise disruption on their lives.

Customers supported the preventative approach set out in the strategy; they felt this will minimise damage to the environment, reduce disruption, and prevent unexpected costs. The five point scale for risk also felt sensible to most customers, however some would have liked more reassurance about how "grade four" pipes are monitored, and some felt a more sophisticated risk rating system may be required. Not all customers were aware of the company's use of CCTV to monitor pipes and pipe lining technology, and hearing about this boosted perceptions of Anglian Water as a company that is doing its best to minimise disruption. However, some customers questioned the lifespan of the lining, and the authors caution that with a less visible workforce such techniques might lead customers to perceive less work is being carried out.

The £50m cost of repairs felt high to customers, but in the context of the company's proactive approach, and what it is achieving, it felt justified. When achievements were presented in absolute numbers (e.g. kilometers of pipes fixed), this made a positive impression on customers, however when they were presented as percentages (e.g. 0.04 of the network fixed), this felt "alarmingly low".

In the **consultation on Anglian Water's draft PR19 plan** with customers from the online community, participants were told that sometimes water treatment works are not able to perform at the capacity for which they were designed. Although in most instances customers are not affected by this reduction in capacity, the company is keen to include a new measure in this area to provide a picture of the **long-term resilience of water treatment works.** Anglian Water is proposing to do a piece of work to understand current performance, and the plan is then to maintain this in the next planning period. The consultation found that participants generally felt **informed and reassured** that Anglian Water is doing all it can to minimise the impact on customers. Participants generally accepted that the company is building its understanding of the issues through more research, although some questioned why this data wasn't available already and why zero incidents is not the aim.

Participants from the online community were also introduced to the company's plans to meet the Environment Agency (EA)'s target of 99% **treatment works compliance**. Participants were told about the need to comply with EA consents

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and the rare occasions where the company might fail to comply (e.g. a failure on sites or a trader accidentially putting something into the water or waste water supply). They were told that Anglian Water is proposing a commitment level of 99% and a buffer of 98.6%, based on a reduction in the existing buffer zone. Participants generally supported this initiative. However some questioned why the company was aiming for the minimum target, with no additional improvement. Some couldn't understand how there could be a buffer that was below the minimum EA requirement.

Treatment works compliance was also explored in the acceptability research on the outline business plan. Of six areas that span water and waste services (mains bursts, external sewer flooding, water treatment works and water recycling centre compliance, low pressure, unplanned outages, and sewer collapses), water treatment works and water recycling centre compliance was ranked of middling importance to customers (average score of 3.54 from household and 3.07 from non-household customers, on a scale from one-six, where six is most important). Of the water measures in the plan, treatment works compliance again emerges as a middling priority, of high importance to 57% of household customers (top ranking measure was mains bursts on 82%) and 50% of non-household customers (top ranking measure was mains bursts on 81%). Most customers felt the targets on treatment works compliance were sufficiently stretching (76% of all household and 88% of all non-household customers). Household customers who understood the measure were significantly more likely than non-household customers to say that they didn't know if the target was sufficiently stretching or not.

Participants in the online community consultation on the draft PR19 plan were also introduced to plans to **reduce the number of sewer collapses**. Customers were told that there are some limitations to the comparative information available in this area, due to the adoption of private sewers by water companies (historically Anglian Water has reported on this metric in a different way to other companies). The company has considered historic data and what continued improvement would entail to suggest a commitment level of 416 collapses by 2025, a reduction on expected performance of 474 in 2020. Customers were told this is stretching, because of the number of private sewers recently taken over that are in a poor state of repair and other factors such as the weather. The proposal includes a "deadband" of 100 collapses a year, based on previous deadbands set by Ofwat. The consultation found that **customers felt the reduction was a step in the right direction**, and most accepted the challenges of working with newly acquired pipe network. However, **some felt the deadband buffer seemed high**. It was hard to get a sense of whether the target was stretching without comparative data.

Sewer collapses were also explored in the acceptability testing of the outline business plan. Of six areas that span water and waste services (highlighted above), sewer collapses were ranked of high importance to customers, second only to mains bursts (average score of 4.32 from household and 4.09 from non-household customers, on a scale from one-six, where six is most important). Of the recyling measures in the plan, sewer collapses emerges as

Relevant To Business Portfolio	Topic Area & Customer Evidence
	the top priority for household customers (87% said it was of high importance), and second to top priority for non-household customers (85% after pollution on 87%). Most customers felt the targets on sewer collapses were sufficiently stretching (58% of all household and 67% of all non-household customers). However, the proportion of customers agreeing was lower than for many other recycling measures. Household customers who understood the measure were significantly more likely than non-household customers to say that they didn't know if the target was sufficiently stretching or not.
Raw water resources, Sewerage collection, Water	A Flourishing Environment General views about a flourishing environment What we already know (as at June 2016)
recycling, Bio- resources	Participants in several qualitative research studies and engagement activities demonstrated limited understanding of the nature and scope of Anglian Water's work in this area.
	Evidence from qualitative research and engagement activities suggests many customers think this work is important. However, views are more mixed when customers are asked to prioritise this alongside other aspects of the service. Some customers feel this work is less important than providing high quality water, safely taking away wastewater and tackling leaks. However, while customers who attended Anglian Water's customer forum events in 2015 felt providing safe reliable and clean water was the most important outcome, "Protecting the water

The Stated Preference studies found **significant willingness to pay for improving environmental performance** across the Anglian Water region among both household and non household customers. The Acceptability research also indicates that protecting the water environment (e.g. rivers, wetlands, and coastal waters) is a **reasonably high priority for customers** (mentioned as one of three top priorities for the company by 53% of participants).

environment e.g. rivers, wetlands, coastal waters" was joint second from top,

alongside the option "removing and treating used water".

As highlighted above, though wastewater appears to be an "invisible" service that some customers don't think about very much, evidence from several quantitative and qualitative sources indicates **generally high levels of satisfaction with the wastewater and environmental service.**

Around three quarters of business and household respondents in the Second Stage Environment study rated water bodies near their homes and businesses as quite good or very good. Only 6% of households and 4% of businesses found the local water environment to be "poor" or "very poor". The study suggests that in assessing river quality, customers attach the most importance to litter and debris, followed by fish and other animal life; lower importance is assigned to water levels and flow, and plant life. In the PR14 Willingness to Pay survey, among household and business customers

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satisfaction was lower with incidents of untreated sewage running into rivers than any other aspect of the wastewater/environment service.

Participants in qualitative research and engagement activities found it quite difficult to comment on discussions about **legal standards**; generally participants felt they needed more information. However, from these data sources there seems to be stronger support for going beyond legal standards where there are clear economic benefits for local people (and/or doing so does not increase bills substantially).

What's emerging (Autumn 2016 onwards)

Recent evidence confirms that this area of Anglian Water's work is important to customers. There is evidence to suggest it is of growing importance, and is key to customer perceptions of whether the company cares about the communities it serves.

In the acceptability research on the Strategic Direction Statement, A Flourishing Environment was ranked 6th of the 10 outcomes, with 83% of customers saying this was important to them. (The highest ranking outcome was seen as important by 97%, and the lowest by 67%). Customers also rated the environment 3rd of the company's six challenges (seen as important by 85% of customers. (The highest ranking challenge was voted as important by 89% and the lowest by 52%).

However, when asked to **prioritise between just three of the six challenges** (climate change, population and economic growth, and environmental protection), customers who took part in the online community trial and who visited the Anglian Water bus chose **environmental protection as their top priority**. Customers taking part in the online community trial said this was the challenge that felt most relevant to them on a personal level and which they felt they could influence.

Some of the participants who took part in the future customer workshops agreed that a flourishing environment was important, but felt that customers were inherently selfish and therefore were likely to prioritise lower bills over environmental protection. Others pointed out that it was **in Anglian Water's own interest to protect the water cycle**, as damaging this will impact negatively on the business.

The customer world focus groups found that "ignorance is bliss" when it comes to climate change; however customers in this (and other) research were concerned about climate and environmental issues if they could **see how they might impact on their own lives** (e.g. flooding). Although customers in the online community trial felt that the environment was the key challenge they could influence the most, several pieces of research and engagement suggest that one of the biggest blocks to customers engaging in wider environmental efforts (especially relating to climate change) is that they are **sceptical of the difference their individual efforts will make**. For example, the online community activities on Anglian Water's vehicle fleet found that customers believed their own efforts, one company's efforts, or even one country's efforts will only be a drop in the ocean.

Despite this, the Community Perception Study research team conclude that there has been a large rise in the numbers of customers that are focused on the

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environment. For example, in 2017/18, 75% said they considered the environment in their day-to-day life (n=1405), a statistically significant increase over the 68% of customers who said this is 2015/16 and 70% in 2016/17. Eighty-three percent felt it was important for businesses to balance the needs of themselves, their customers, the local community and the environment (n=1404). Thirty seven percent agreed that if a company had a poor ethical and environmental policy it would stop them from using it (n=1384).

The analysis of social and digital media content for the period 1st February 2017-31st January 2018 also found that **pollution and the environment was the most engaging content theme**. Pollution and environmental-focused content performed the best across the metrics used in the analysis (it was ranked first in terms of volume and engagement, fourth in terms of reach, and first in terms of positive sentiment). The topic featured in the third most engaging owned post for the entire period under review (after popular posts about Rutland Water), which uncovered the damaging impact of wet wipes and achieved 1.6K shares.

Aggregate results from the customer segmentation research also indicate that customers are interested in the environment. The **environment was ranked second of nine topics in terms of customer interest**, with 63% stating an interest in it (health was ranked just higher on 64%).

Some of the most robust evidence on how customers prioritise environmental issues in relation to other aspects of the service comes from the Main Stage Willingness to Pay and Water Resources Second Stage Surveys.

The Willingness to Pay research suggests that customers think all of the attributes tested in the survey (relating to water, sewerage and wider services) are important. In relation to wider aspects of the service, household customers marginally prioritised customer service (57% saying this was very important), over river water quality (55%) and pollution (54%, n=843, all subsamples, DCE and BWS surveys). In comparison to household customers, non-household customers placed more emphasis on customer service (57% said this was very important) relative to pollution incidents (50%) and river water quality (46%, n=346, combined and sewerage only subsamples). In relation to sewerage services, household customers ranked bathing water quality at beaches slightly lower than their top ranked issue of sewer flooding (54% felt this was very important, compared to 61% for internal and external sewer flooding), but above odour (47%, n=859, combined and sewerage only subsamples, DCE and BWS surveys). Non-household customers placed less emphasis on bathing water quality (42% felt this was very important, n=349, combined and sewerage only subsamples).

However overall, results from the Willingness to Pay Survey suggest customers generally prioritise improvements that have a wider impact across the region (e.g. leakage, river water quality, and pollution incidents). It also suggests that customers have a strong preference for avoiding deterioration in service levels, especially in relation to environmental outcomes (e.g. bathing water quality, river water quality and pollution incidents) as well as aspects

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of service that have a high and direct impact on customers, such as sewer flooding (inside properties), and severe water restrictions (rota cuts).

In the initial, "package", set of questions in the Water Resources survey, a desire to protect the environment was one of the key reasons both household and non-household customers gave for supporting the improved package (ranked second, after affordability, for both types of customer).

In the Community Perception Survey, customers were asked if they agreed with the statement "Anglian Water cares about the environment". This year (2017/18), 63% agreed (n=1233), reflecting similar results from year one and two of the survey. However, when customers were asked about their (unprompted) awareness of environmental and community activities that Anglian Water are involved in, 78% said they were not aware of any such activities, or that they didn't know, reflecting similar results for previous years. Customers in the "comfortable and caring" group were more likely to be aware of these activities. When customers were prompted with details of specific Anglian Water initiatives, 53% of customers still said they had not heard of these programmes (results were 56% in year one, 58% in year two). This is despite the fact that in the August 2017 survey, when customers were asked which areas of Anglian Water's business performance they were most interested in, the environment was ranked joint second (with 40% of customers saying they were interested in this topic).

The Community Perception Survey indicates that increasing customers' awareness of Anglian Water's involvement in environmental and community activities **boosts positive perceptions of the company**. This year, 67% of household customers said their opinion of Anglian Water had improved after hearing about these aspects of their work, a **statistically significant increase** over the 63% who said this in 2015/16.

Analysis of this year's Community Perception Survey also found that perceptions of whether Anglian Water "cares for the environment" and is "socially responsible" were key drivers of customer response to the caring for communities outcome delivery incentive. (In other words, these were the questions that most strongly correlated with responses to the overall question of whether Anglian Water cares about the communities it serves).

Customers who took part in the online community regarded the company's plans to reduce its negative impact on the environment as "indisputably positive" (working with the Environment Agency to reduce the amount of water abstracted in places where this damages the environment, keeping surface water out of sewers to prevent overflows and pollution, and investing in the sewerage network to keep pace with a growing population). These plans were thought to demonstrate that Anglian Water is thinking ahead and is willing to work with others. Many customers were also pleased to see that Anglian Water was planning to engage with policy development in this area. However, not all customers understood the connection between Brexit and environmental protection. Some customers feel compliance with the law is just something that the company has to do, rather than a positive choice to highlight in communications with customers.

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Aggregate results from the segmentation study suggest that slightly more customers support **raising finances for environmental protection** through their water bill (42%) than through income tax (37%). Eight percent of customers think they shouldn't have to pay at all, and 12% don't know how finances should be raised for this.

In the acceptability testing of **Anglian Water's performance commitments and outcome delivery incentives (ODIs)**, the proposed bespoke commitment on "**natural capital**" was only ranked 7th of 11 commitments in terms of importance by household customers (judged to be important by 36%). However, it was ranked fourth by non-household customers (judged to be important by 61%).

The **consultation on Anglian Water's draft PR19 plan** with customers from the online community found that, overall, participants supported the draft plan. One of the key reasons for this was that they felt confident that the company is incorporating **greater environmental protection measures** in the plan (alongside addressing leaks/bursts, sewer flooding and resilience).

In the consultation, participants were introduced to **Anglian Water's plans to have an overall positive impact on the environment.** They were told that the company plans to develop and implement a "balance sheet" of activities showing over time whether they are having a positive or negative overall impact on the natural environment. While the concept of **natural capital** is still new, and there is limited information on historic or comparative performance, the company will develop a strategy alongside the business plan and between 2020 and 2025 report on the implementation of this. The consultation found that customers **overwhelmingly supported** the company taking steps in this area. However, some emphasised that not all impacts are equal and urged the company to take account of the scale of each impact considered, as well as the levels of performance achieved on each.

In the acceptability testing of the outline business plan, of the recycling measures explored, natural capital emerged as a **fairly low priority**. It was judged to be of high importance to 35% of household customers (sewer collapses was ranked top on 87% and operational carbon lowest on 25%). Similar proportions of non-household customers (33%) judged it to be of high importance (pollution was ranked top on 87% and embodied carbon bottom on 30%). **Most customers felt the target for natural capital was sufficiently stretching** (63% of all household and 73% of all non-household customers).

Members of the online community who were involved in the consultation on the PR19 plan were also introduced to the **Water Industry National Environment Programme (WINEP),** which details what companies need to do to meet environmental obligations. (This is developed by companies, Natural England and the Environment Agency, with the final list of obligations set by the EA). Participants were introduced to Anglian Water's proposed commitment level to deliver the WINEP in line with EA requirements. They were told that this is likely to be stretching as the company expects the WINEP for the period 2020-25 to be significant, and Anglian Water will have the biggest programme of any water company to deliver. The consultation found that participants felt **protecting the**

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environment was key, and collaboration with the EA and Natural England was welcomed. However, **some were unsure why Anglian Water is being asked to achieve more than other companies**.

In the acceptability testing of the outline business plan, of the recycling measures explored, the WINEP measure was judged of **middling importance**. Forty three percent of household and 40% of non-household customers felt it was of high importance. The WINEP target was **ranked top for perceived stretch** by both types of customer (74% of household and 90% of non-household customers felt it was sufficiently stretching). Household customers who understood the measure were significantly more likely than non-household customers to say that they didn't know if the measure was sufficiently stretching.

Anglian Water's plans for WINEP/natural capital were explored in more detail in a dedicated discussion with members of the online community. Customers were provided with a **case study of the Ingoldisthorpe Water Treatment Centre** in Norfolk. In response to new Environment Agency targets for ammonia and phosphorus in effluent emitted from the treatment centre, Anglian Water has supported the development of a wetland, designed, constructed and operated by the Norfolk Rivers Trust (NRT). The purpose of the wetland is to improve the quality of water from the treatment centre before it is discharged into the River Ingol. The wetland will also enhance biodiversity, by providing a new wildlife habitat for invertebrates, mammals and birds. The NRT have secured a lease to operate the wetland for the next 20 years from the local farmer who owns the land.

Participants found the case study very helpful in bringing the issues to life for them. Discussions revealed that participants bought-into a move to natural capital solutions. Although these are not new, in this context customers perceive them to be innovative and less aggressive than "hard-engineering" solutions (water treatment works). Overall, they were regarded as a very positive approach to water treatment and a win-win in terms of cost, compliance and environmental impact. Members of the online community saw an opportunity for Anglian Water to become a leader in this area, by encouraging other companies to follow suit.

The discussions revealed that water treatment works were often regarded as "eye-sores", and were associated with noise and pollution. In contrast, natural capital solutions were associated with a range of benefits, including: minimal disruption to the environment and wildlife and to nearby residents during operations; enhancements to local biodiversity; aesthetic improvements to the local area; potential new visitor/educational attractions for local people; cost-efficiency for customers; and income for local farmers. Participants also liked the focus on collaboration, which they felt would ease the pressure on Anglian Water and result in lower operational and maintenance costs for the company. They were reassured to hear that additional funding will not be sought if the project doesn't meet regulatory requirements.

Although they were generally very supportive of natural capital solutions, customers raised a number of **questions and concerns** about them. First, some customers questioned **how scalable these solutions are**, and the extent to which they can be rolled out in urban areas (as opposed to small, rural, sites). Second,

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they questioned whether brokering a workable deal between the different parties involved could become very time-consuming, and whether the permitting arrangements might change, leaving Anglian Water to take responsibility for management and maintenance of the wetland, as well as the treatment centre. Third, customers felt that a 20-year lease from local farmers felt quite short, and questioned what would happen if the farmer didn't want to renew the lease. Finally, they wanted to know what might be the impact of climate change or prolonged periods of decreased rainfall on the wetlands environment. Customers also wanted more reassurance that the same water quality standards will be met with natural capital as opposed to "hard-engineering" solutions. They also wanted to be clear that these solutions would not involve "stealing" prime agricultural land or using developable land that would be very expensive to lease. Customers were keen to receive more real-life case studies about natural capital solutions and the benefits and learning emerging from other schemes.

Raw water resources, Sewerage collection, Water recycling, Bio-resources

Environmental issues and priorities

What we already know (as at June 2016)

Of a range of environmental issues, preventing pollution of the water environment emerges as a priority concern In the Second Stage Environment (Stated Preference) study more household and business respondents chose this as their top environmental issue than any other choice offered. In the Second Stage Water Resources (Stated Preference) study, water security was ranked rather lower in a list of environmental issues/challenges.

Respondents to the Domestic Customer survey were asked to complete the investment simulator. The lowest priority (in terms of the proportion of the customers wanting to increase spend from the pre-set level) was river improvements. Twenty four percent of customers opted to increase spend in this area (55% chose to maintain the current level of spending and 21% chose to decrease it). Overall the average increase in spend was only 0.8%. When respondents were asked to choose which (from a list of) aspects would increase their satisfaction with the value for money of the service, river water improvements emerged as the 8th most popular option (of 11), selected by 14% of respondents.

However, among respondents to the Second Stage Environment Study, reducing pollution and improving rivers and canals for wildlife was household and business customers' top priority for improving the local water environment. The PR14 Willingness To Pay main survey focus group research suggests that when customers understand how much raw water is taken from rivers to supply customers it tends to heighten the importance they attach to river water quality.

Participants in the PR14 Willingness To Pay focus groups were also less tolerant of pollution caused by failures in Anglian Water's assets than pollution caused by third parties, or accidents caused by extreme weather conditions. If rivers were polluted, and given that half of Anglian Water's water supply comes

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from river abstraction, customers wanted reassurances that any previously polluted water would not have an adverse impact on health.

Participants in qualitative research and engagement activities felt that the **region's beaches** were popular with residents and an important draw for visitors. At the deliberative customer events, there was strongest support among household customers for going beyond legal standards in relation to beaches, as they were thought to be an important asset for the region's economy.

Thirty one percent of respondents in the Domestic Customer survey chose to increase **investment on coastal water improvements** from the level preset in the investment simulator (the third to last most popular choice on this dimension). Fifty five percent chose to maintain spending at the current level and 15% chose to decrease it. Customers in socioeconomic group B (41%) were more likely to opt for an increase in investment in this area compared with those in groups C1, C2, D and E (between 26-29%). Customers aged 75+ (67%) were more likely to call for no change in the level of investment in this area compared to respondents aged 18-59 (between 46-52%). When respondents were asked which (from a list of) aspects would increase their satisfaction with the value for money of their service, coastal water improvements emerged as the 9th most popular option (of 11), selected by 10% of respondents. This option was more likely to be selected by those in socioeconomic category B (16%) compared with those in D (5%) and E (10%).

Among household customers at the deliberative events, the company's **work protecting a particular species of bird** was not thought to be the most compelling aspect of its environmental work (as it was seen as less directly linked to benefits for local people).

Preference) studies, loss of biodiversity and natural habitats does not emerge as the most important issue for household customers, given a list of other environmental issues and problems. Similar results were found among business respondents. However, given there is a biodiversity programme which includes biodiversity duties and work for protected species and invasive species management, willingness to pay for biodiversity and natural habitats was estimated as part of the customer research. (This was estimated based on the value of moving from 'unfavourable' to 'favourable' site status, and vice versa). This indicates management of biodiversity and natural habitats have a reasonably high willingness to pay values, in line with other environmental measures.

What's emerging (Autumn 2016 onwards)

Multiple strands of research and engagement in this wave of activity confirm that **pollution and protecting local water bodies are key customer concerns**. Evidence suggests problems are infrequent, and **most customers are broadly satisfied** with the quality of local rivers and performance on pollution incidents.

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However, **satisfaction is lower than for other attributes**, and these areas (along with bathing water quality) are clear customer priorities for improvement.

As highlighted above, the analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that **pollution and the environment** was the most engaging content theme. It featured in 738 conversations, with a potential reach of 144K people. As a topic, it was ranked first in terms of volume and engagement, fourth in terms of reach, and first in terms of positive sentiment. The positive sentiment score was explained by the impact of content from environmental organisations, who shared news about new green initiatives. This optimism did not translate to the general public, however, who criticised Anglian Water for not addressing environmentally-wasteful leaks and highlighted the company's role in contributing to river pollution.

Pollution risk was also identified as a key challenge for Anglian Water and the industry in qualitative interviews conducted for the segmentation research, and at the co-creation events.

In the Acceptability research, when customers were introduced to Anglian Water's seven water quality and customer satisfaction goals, **zero pollutions and flooding was ranked second most important**, with 93% saying it was important. (The highest ranking goal was rated as important by 95%, and the lowest by 68%). Tackling pollution was also one of the issues customers wanted to see emphasised more in the 10 outcomes.

As highlighted above, customers who took part in the online community regarded the company's plans to reduce its negative impact on the environment as "indisputably positive" (including keeping surface water out of sewers to prevent overflows and pollution). In the acceptability testing of Anglian Water's Performance Commitments and Outcome Delivery Incentives (ODIs), fairly high importance was given to the bespoke ODI on coastal water quality. This was ranked third most important by both types of customer (seen as of high importance by 56% of household customers and 69% of non-household customers).

Despite the importance attached to this area of work, the Community Perception Survey suggests that **awareness of Anglian Water's work in protecting water bodies remains quite low**. This year unprompted awareness of RiverCare was just 5%, however this was a **statistically significant increase** over 2015/16 results of 3%. Prompted awareness of RiverCare was 22% (results for the previous two years were both 18%). The company's **BeachCare** initiative seems to be even less well known. Prompted awareness was just 10% this year, however this was also a **statistically significant increase** on previous years' results of 8%.

The Willingness to Pay survey found that the majority of household customers had not experienced any problems with their water or sewerage services in the last five years (72%). Of those that had, **just 2% had experienced concerns about the quality of local water bodies** e.g. rivers or beaches (n=1353, all subsamples, DCE and DWS surveys). A smaller proportion of non-

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household customers had experienced no problems with their service in the past five years (55%). However, again, only a very small proportion (5%) reported concerns about the quality of local water bodies (n=500, all subsamples, DCE survey).

In the (DCE) Willingness to Pay survey, the majority of household respondents said they found Anglian Water's performance for wider service areas to be 'satisfactory' or 'somewhat satisfactory'. However, satisfaction with river water quality (59%) and pollution (62%) was lower than for all other attributes tested in the survey (n=542, combined and sewerage only subsamples). In contrast, in relation to sewerage services, 70% of household customers said they were satisfied with bathing water quality at beaches (n=558, combined and sewerage only subsamples, DCE survey). In the BWS version of the household survey, the largest proportions of respondents selected customer service (42%) and bathing water quality (31%) as the best performing aspects of Anglian Water's wider services, with river water quality (43%) and pollution incidents (32%) as the worst (n=301, combined subsamples).

In the Willingness to Pay Survey, the majority of non-household respondents also found Anglian Water's performance for wider service areas to be 'satisfactory' or 'somewhat satisfactory'. However, levels of satisfaction with pollution and river water quality were again among the lowest for all attributes tested in the survey, and **lower than for household customers** (50% for pollution incidents, and 52% for river water quality, n=346, all subsamples). **In relation to the sewerage service, lower proportions of non-household customers were satisfied with bathing water quality** (54%, n=349, combined and sewerage only subsamples).

The study combining Anglian Water's customers' subjective preferences with their willingness to pay for river water improvements also found that most respondents had reasonably positive perceptions of river water quality. In the Q research, of the (45) respondents whose answers were included in the final analysis, 62% perceived the ecological and recreational quality of water at their most visited site to be of medium quality. Twenty two percent thought the ecological quality was high and 25% thought recreational quality was high. Only 3% of respondents felt that the ecological quality was low, and none of the respondents thought that recreational quality was low. (Thirteen percent, or 6 people, had no view about quality as they did not visit local rivers).

Reflecting reasonably positive views of Anglian Water's performance, most household respondents to the Willingness to Pay Survey opted to maintain rather than improve current performance levels for wider services (54%-67%, depending on the attribute). Compared to water and sewerage services, however, slightly more respondents wanted to see improved performance in these areas, especially in river water quality and pollution incidents (both 37%, n=542, combined and water only subsample, DCE survey). In relation to sewerage services, most household customers wanted to maintain current

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performance in relation to water quality at beaches (59%), with 32% wanting to improve it (n=558, combined and water only subsamples, DCE survey).

Non-household customers also prioritised improvements in river water quality and pollution incidents. However, **more non-household customers wanted to improve than maintain current performance** in these areas (48% and 47% respectively, n=346, all subsamples). In relation to sewerage services, similar percentages of non-household customers wanted to improve bathing water quality (34%, n=349, combined and sewerage only subsamples).

In selecting a package of improvements relating to wider services, both household and non-household customers placed greatest weight on river water quality (29% for households and 36% for non-households) and pollution incidents (28% for households and 33% for non-household customers). (Households n=542, non-households n=346). In relation to sewerage service, household customers placed greatest weight on sewer flooding inside properties (27%), followed by bathing water quality at beaches (22%, n=558). Non-household customers also gave the greatest weight to these issues, although with a more even weighting attached to each (25% for both, n=349).

The "package" exercise in the Water Resources Second Stage survey also found that in the majority of cases, household customers had never experienced any service issues. However, 22% of household customers reported experiencing a problem with pollution affecting rivers or coastal bathing waters at some point in the past (the range was 57% for a hosepipe ban, and 15% for sewer flooding). The equivalent figure for non-household customers was 37%. When asked to allocate a potential future bill increase to tackling various service problems, households chose to allocate a middling level of resource to pollution incidents (the highest allocation was to complaints about the aesthetics of tap water, and the lowest to smart meters). Similar results were found in the non-household survey (where the highest allocation was to leakage and the lowest to smart meters and internal sewer flooding).

The online community activities focused on river quality perhaps help to explain why customers prioritise this issue. This research found that **rivers are viewed as more than just "water bodies"**. They are valued as a natural asset providing a sensory experience that facilitates relaxation, health and wellbeing.

The research found that the ideal river is perceived to one that is as close as possible to its natural state, with as little (visible) human impact as possible – i.e. free flowing, clear water, visible wildlife (both in and around the water), and healthy river banks, with plenty of vegetation. However, it also found that customers want rivers to be accessible for recreation (fishing, boating, cycling, walking etc), which brings with it expectations about car parks, crossings and amenities (e.g. cafes and toilets).

The online activities found that customers recognise that managing rivers necessitates careful balancing of human involvement with the river environment. However, in thinking about human impact, it found that customers **tend to more**

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immediately focus on visible waste and pollution, poor maintenance, and over-development, rather than the chemical content of water.

The research found that **looking after rivers was regarded as a shared responsibility** between Government and the Environment agency (setting guidelines and ensuring regulations are met), local authorities (clearing up local rivers and educating the public), local businesses and industries (upholding standards and acting responsibly, especially in relation to chemical waste), and the public (who are perceived to be the primary cause of visible waste).

The research found that customers' **expectations of Anglian Water mirrored those they had of other local businesses**. However, customers also felt the company had a **role to play in influencing the behaviour of others**, for example, facilitating conversations between all the parties involved in safeguarding river water quality, collaborating with local authorities on local initiatives (especially clear-up activities), working on preventative measures with business and industry, and educating the public about respect for river environments.

Customers who took part in the research accepted that Anglian Water's investment should go above and beyond ensuring that river water quality meets current chemical standards. They felt the company should also facilitate visible improvements to rivers that focus on aesthetic quality and public use and enjoyment. However, the research found that if Anglian Water places too much focus on aesthetics and recreational improvement, customers start to feel this is excessive, or a job for another agency (such as the local authority).

Some recent research suggests that there may be **systematic differences in customers' views** about the protection of local water bodies.

In the segmentation research, the majority of customers (66.7%) strongly agreed that it was important to **improve rivers and coastal waters** (answering 9 or 10, where 10 is strongly agree). However, just 39.1% of "tech savvies" (28% of the customer base) but 81.8% of "eco-economisers" (14% of the customer base) strongly agreed to this.

The "Q analysis" carried out as part of the study combining customers' subjective preferences with their willingness to pay for river water improvements found that most respondents preferred conservation to be incorporated within decision-making, and supported the idea that major polluters should be doing more to reduce pollution. However, beyond these points of consensus, the study appeared to confirm that customers have a range of views about how best to tackle pollution. The analysis revealed five statistically distinct viewpoints that represent shared perpectives on issues about water quality.

For those respondents who share **viewpoint 1**, "**ethical and ecological concerns are paramount**". These respondents feel that clean **rivers are an asset** – a rich and valuable environment in which species can flourish and one that humans can use and enjoy for recreation, (but not as an economic resource from which to derive profit). This group displays a **high degree of intergenerational regard**; they believe that rivers should be protected for our

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children and our children's children to enjoy. The group believes that river water quality is a very serious issue, and not enough is currently being done to protect and improve riverine environments. They believe the polluter must consider conservation ahead of financial goals or profit. They feel that the agricultural sector should be regulated so that land is better managed and pollution is prevented. Respondents in this group are willing to pay higher prices for food and water to support remediation efforts, providing improvements occur. However, they also express the highest degree of pessimism that such measures will take place in practice. The research found that this group of respondents are predominantly male, have the oldest average age, are the most likely to have a graduate level education, and tend to be relatively prosperous.

Those respondents who share viewpoint 2 subscribe to "financial controls on pollution reduction for major polluters". These respondents also have a deep concern for the wellbeing of the ecological environment, and feel that river pollution is something that major polluters should be tackling. They feel that controls on agriculture and financial penalties on polluting water companies are key methods by which remediation should be achieved. They strongly believe that the pollution reduction strategies implemented by major polluters should not be financially incentivised. However, despite approving of financial controls, they strongly disagree with increased legislative controls, relative to other respondents. This group distrusts the water authorities and are unwilling to contribute to remediation efforts themselves via higher food or water prices. The research found that the highest number of respondents fell into this group. Respondents in this group have the lowest mean income, the lowest proportion of members with a graduate education, the lowest membership of environmental organisations, and took the lowest mean number of river trips in the year preceding the study.

Viewpoint 3 is summarised as support for "hierarchical, government-driven leadership to protect river ecology". Key to this viewpoint is agreement with the statement "strong effective leaders are needed to help reduce river pollution". Respondents sharing this viewpoint support government intervention to penalise water companies that pollute and regulate the agricultural sector. They see a role for increased legislation, as well as the use of accurate information and the best possible equipment to reduce pollution. Perhaps as they use rivers less than average, river water quality for recreational use is less important to these respondents; instead their concern is with the ecological health of rivers. These respondents are more likely to be female, and the proportion with a graduate education is well above the study mean.

Those respondents that share viewpoint 4 support "pragmatic use of the environment and collaboration between polluters". These respondents have the highest levels of distrust of authorities. They don't believe that strong leaders are necessary; instead they feel polluters should collaborate with each other and seek out local solutions to pollution problems. Although these respondents support regulation of agriculture and financial penalities for

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water companies if pollution persists, they are also **open to incentives** to encourage polluters to make their practices more environmentally friendly. They are also **willing to pay more on their water bills** to ensure improvements. These respondents are **somewhat utilitarian in their views**; they regard rivers as an asset to be used, and are **less concerned about intergenerational equity** compared with other respondents. This group believe rivers should be clean enough to protect human and other life, despite not wishing to use rivers more frequently themselves. However, they are **markedly less concerned than other respondent groups about species loss**. These respondents are more likely to be **male**, and mean income is slightly lower than the study average.

Viewpoint 5 is characterised as support for "libertarian pollution control via legislation and monitoring". For respondents in this group legislation, backed up by accurate data, is the preferred method of pollution control. Relative to the majority of respondents, this group does not believe river water quality problems are a serious issue. However, the group does feel it is wrong for polluters to profit while pollution still occurs, and thinks major polluters should be doing more to control pollution. These respondents are generally more supportive of farmers than other respondents; they are less willing to see farmers penalised for livestock pollution and are less willing for them to be heavily regulated. Similarly, compared to other respondents, they are less likely to support financial penalties for poorly performing water companies. In terms of the action they are prepared to take themselves, these respondents are less willing to pay more on their water bills to improve water quality, but they are more willing to pay higher food prices to support farmers' pollution reduction efforts. Although this group distrusts authorities more than most respondents, they feel better informed on river pollution issues. This group includes the smallest number of respondents. The mean age of respondents is the lowest of the five groups, and the **mean income is the highest**. The group has the highest proportion of respondents who are members of environmental organisations. These respondents also visited rivers more than any other group in the year prior to the study, and felt that having clean rivers that can be used for recreational activity was important. This group was the most optimistic about the future of river water quality.

The authors of this report had hypothesised that expert respondents may share similar attitudes and psychological strategies. However, the sub-sample analysis revealed that this was not the case. In fact, there was actually **greater diversity within the experts' viewpoints**, **compared to other types of respondents**. The analysis of experts' viewpoints also produced the fewest number of respondents who were confounded across the five factors, suggesting that the experts hold distinct and well-formed (although divergent) opinions on river management.

The study authors suggest that the five viewpoints provide plausible explanations for respondents' choice behaviour and their willingness to pay for river water quality improvements. In line with previous research, they found respondents had higher willingness to pay for ecological rather than recreational improvements, although being a recreational user of rivers had a positive impact

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on willingness to pay for recreational water quality. The research found that respondents holding viewpoint 1 ("ethical and ecological concerns are paramount") had insignificant, negative willingness to pay values. This suggests they **wish to be compensated for water quality improvements.** The authors suggest this group are doubtful that future water quality improvements will meet their high expectations, and may be protesting.

Within the smaller sub-sample of Q respondents (45 people) distance from the survey river was found to be an insignificant determinant of choice preferences. However, distance was significant within the larger sample (200 respondents); respondents living further than 8km from the survey river were found to be significantly less willing to pay for improvements (to both ecological and recreational water quality).

The authors conclude that a small sample is suitable within a Q experiment to capture the range of viewpoints on an issue under investigation, and they can be reasonably confident these results generalise to other similar populations within the Anglian Water region. They suggest that Anglian Water may wish reflect on their information dissemination strategies in light of the different viewpoints, attitudes and motivations revealed in the research. However, the authors note that the small sample of Q respondents produces econometric results that have considerable variation in mean willingness to pay values that deviate considerably from those estimated for the larger sample. Given this, they make no claim of model transferability. They conclude that to create a robust, transferable valuation model capable of integrating respondents' subjective preferences, large Q datasets are required.

Anglian Water tested the results of the Q-Analysis research with a group of participants from the online community to see if there were any associations between different types of customer (by segement, age and gender) and the five groups revealed in the UEA study. Overall, this research does seem to confirm many of the UEA findings about the different types of customers who tend to share the five viewpoints. (Findings on the groups that tend to reject each viewpoint seem less in tune with the UEA findings, although the UEA researchers did not set out their data in this way so it is harder to make comparisons).

Overall, of the 41 participants who took part in the online activities, the largest number of people preferred option two, "financial controls on major polluters to achieve pollution reduction", the view point that also had the highest number of respondents in the UEA study. The next popular choice was option one "ethical and ecological concerns are paramount". The other options garnered similar, but lower levels of support. The most unpopular choice was option five, "pollution control via legislation and monitoring", with the other options rejected by a similar and smaller number of people. Again, this viewpoint also had the fewest number of respondents in the UEA study.

The facilitators of the online community identified some **subtle differences between the genders**. Women were less willing to pay for remediation (option one "**ethical and ecological concerns are paramount**"), a finding that was also found in the UEA research (where 87% of those sharing this viewpoint were

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male). The online activities also found that women felt more strongly than men that the onus should be on major polluters to pay (option two "financial controls on major polluters to achieve pollution reduction"). This finding does not appear to be strongly supported in the UEA study (where 54% of those sharing this viewpoint were female). The online activities found that women more strongly rejected viewpoint three ("hierarchical government-driven leadership to protect river ecology"). However, in the UEA study, the researchers found those sharing this viewpoint were more likely to be female (60%). The online activities found that men more strongly rejected viewpoint four ("pragmatic use of the environment and collaboration between polluters"). However the UEA study found that those sharing this view were marginally more likely to be male (56%).

The online activities found that age associations generally followed the pattern for opinion as a whole, but with a few outliers in the youngest and oldest groups. The research found that the older group (65+) leaned towards a halt in commercial use of water bodies to protect them (view point one, "ethical and ecological concerns are paramount"), which again appears to confirm results from the UEA study. The online community activities found that younger customers (18-34) were more likely to reject viewpoints three and five ("hierarchical government-driven leadership to protect river ecology" and "pollution control via legislation and monitoring") suggesting a distrust of government initiatives and legislation. However the UEA study found that younger people were more likely to support viewpoint five.

The UEA study did not explore associations between Anglian Water's customer segments and the viewpoints revealed in the Q-Analysis, but recommended this as a follow-on piece of research. The online activities found that "protective provincials" appeared more open to controlled exploitation of water (viewpoint four "pragmatic use of the environment and collaboration between polluters"). Customers in the "family first" segment were more likely to reject the first viewpoint ("ethical and ecological concerns are paramount"), because of the reference to not exploiting water bodies which, with an increasing population, they felt was unrealistic. The authors of the study observed that "careful budgeters" appeared to reject government intervention, as they did not believe in its capabilities. (Further, more robust, quantitative research involving larger samples may be required to provide more conclusive evidence on associations between the five viewpoints and different types of customer.)

The online community activities on **pollution definitions** explored the language used to describe pollution and how this fits with customer understanding and expectations. In a poll on the online community, customers were asked to choose **which pollution category best reflected the description of pollution** provided in the research. This description was: "Occasionally the sewerage system is affected by pump failures, blockages and heavy rain, which results in untreated sewage entering and polluting rivers or the sea. This can cause some damage to fish and other wildlife. All water companies are required to reduce the number of

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pollution incidents over time. There are around 210 pollution incidents each year across the Anglian Water region."

The three category descriptions provided were: "Pollution likely to be visible and may smell. There will be a major impact on the fish population and habitats, with numerous fish being killed. Recreational use of the river will be majorly affected. Odour from the pollution is likely to impact on human health" (category one); "Pollution likely to be visible or may smell. There will be reduced recreational use of the river. Dozens of fish likely to be killed and other wildlife impacted" (category two); and "Localised impact and pollution may not be visible. Minor impact on fish with less than 10 fish killed and no impact to other wildlife" (category three).

A majority (51%) of (the 127) participants who took part in the poll felt that category two best reflected the pollution description provided. Thirty percent felt that category one was the best fit and 19% felt category three was the best fit.

For the 51% of customers who opted for category two, this descriptor was felt to reflect the "middle ground"; it was severe, but not too extreme. It outlined the damage that could be caused, but suggested the harm to human life was not likely to be substantial. It helpfully emphasised the visible/sensory impacts that customers are likely to experience, and the impact on recreational activities.

To the 30% of customers who opted for category one, this felt more appropriate due to a perception that **pollution incidents are by their nature severe** and likely to have a significant impact on human health as well as the environment. Some participants who chose this option had experienced sewerage problems and this descriptor was felt to best match their experiences.

Category three felt the most relevant to 19%, who didn't feel particularly alarmed by the description provided. Less than 10 fish dying, with no impact to other wildlife, and a lack of smell or visible pollution was thought to suggest something that wasn't very serious and fitted with the phrase "some damage". The research team observed that lack of experience of obvious pollution incidents meant some participants lacked a clear perception of how serious pollution can be.

In the consultation on Anglian Water's draft PR19 plan, customers were introduced to the company's plans to improve performance on pollution incidents. Using comparative data based on a forecast of the best performing companies in the industry in 2025, Anglian Water are proposing a performance commitment level of 165 incidents per year by this date (16.5 incidents per 10,000km of sewer), an improvement over expected performance against current targets in 2020 of 219 incidents (or 29 per 10,000km). Participants were told that this would be a significant reduction on expected performance in 2020 and a level beyond what has been achieved by the company in the past. Wetter weather could also make this more difficult. Participants felt that the reduction to 165 felt like a substantial improvement and so a step in the right direction. However, some questioned how Anglian Water will achieve this in practice. Some also questioned the impact of "severe" as opposed to "non-severe" incidents and why this wasn't included in the assessment.

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In the acceptability research on the outline business plan, the importance of pollution as an issue was confirmed yet again. Eighty six percent of household and 87% of non-household customers said this was of high importance (the second to top ranking measure for household customers and the top ranking issue for non-household customers). **Most customers said they felt the targets on pollution in the plan were sufficiently stretching** (69% of all household and 76% of all non-household customers agreed). Household customers who understood the measure were significantly more likely than non-household customers to say that they didn't know if the target was sufficiently stretching or not.

In the consultation on the draft PR19 plan with members of the online community, participants were also introduced to the company's aims to reduce abstraction at environmentally-sensitive sites, at times of low flows (usually when there is dry weather). They were told that Anglian Water's current performance is 77.5ML over the baseline, and that the company's proposed stretch goal is to reduce the amount of abstraction to 84 ML below the abstraction threshold across all sites. This is a reduction of 208%. They were told that this will require continuing strong performance on leakage and reductions in per capita consumption. The consultation found that participants liked the focus on future sustainability. They found it quite difficult to assess whether the volumes of water involved were good or not, however they agreed that reducing abstraction was the right thing to do. Questions or concerns centred around the extent to which meeting this commitment will rely on other measures, for example if there were "non-sensitive" sites where abstraction would therefore have to increase, or if water-transfer was part of the solution.

hartlepool In the acceptability research on the outline business plan, the Abstraction Incentive Mechanism (AIM) was ranked last in a list of 12 water measures by household customers (of high importance to 36%). The AIM was also ranked near the bottom of the list of water measures by non-household customers, although more felt it was of high importance (45%). Companies with high water consumption were significantly more likely to rate the measure of low importance than those with low consumption. Most customers felt the AIM target was sufficiently stretching (65% of household and 78% of nonhousehold customers), however perceived stretch was lower than for several other water targets. Customers of Hartlepool Water were significantly more likely to view the target as sufficiently stretching than customers of Anglian Water. Although the vast majority of customers understood the AIM target (91% of household and 94% for non-household customers), of the water measures tested understanding was lowest for non-household customers and second lowest for household customers.

Members of the online community who were consulted about Anglian Water's draft PR19 plan were also introduced to the company's aims to **improve the quality of designated bathing waters e.g. rivers and beaches**. Customers were told that the Environment Agency (EA) designates the quality of bathing waters based on the average quality over a four-year period. Getting all waters to

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excellent status is not possible due to the actions of third parties, e.g. farmers, and the prohibitive expense involved (which could impact on customer bills). Participants were told that expected performance by 2020 is 32 bathing waters reaching excellent status (of 49 designated ones in the region). Anglian Water is proposing a stretch goal to improve the number achieving excellent status from 32 to 37 by 2025, with a buffer of 32 to reflect factors outside of their control. The consultation found that this **initiative attracted considerable support.**Participants saw the value in this proposal, which they felt would have a positive impact on their local environment and enjoyment of the area. However, **some participants were keen to know what would happen to the remaining 17 sites.** Some participants were also quick to suggest that "third parties" whose actions impact negatively on beaches and rivers should be fined or suffer other penalties (rather than this being the responsibility of Anglian Water alone).

In the acceptability research on the outline business plan, of the recycling measures tested, bathing waters attaining excellent status was regarded as of middling to low importance. It was of high importance to 39% of household customers (the top ranking issue, sewer collapse, was of high importance to 87%), and 43% of non-household customers (the top ranking issue was pollution, on 87%). Most customers felt the targets in this area were sufficiently stretching (71% of all household and 67% of all non-household customers), however, the proportion of non-household customers rating the target as sufficiently stretching was lower than for many other recycling targets. Household customers who understood the measure were significantly more likely than non-household customers to say they didn't know if the target was sufficiently stretching or not.

In the the current wave of research and engagement, there is less information about Anglian Water's work in **conserving nature and wildlife** than there is about river and coastal waters and pollution.

In the Community Perception Survey, unprompted awareness of **Anglian Water's work conserving nature was low;** it was just 3% this year. Prompted awareness was 20%.

In the online community, customers felt that the company's plans to **conserve habits and biodiversity** show that it is "doing its bit" and resonate with their own concerns. However, some customers think this is something the company should be doing anyway, rather than an intention for the future. Quotes from customers who took part in the online community indicate that some would like **more information** on the company's work in this area, including some **specific examples** to bring it to life.

In the discussion on **natural capital** with members of the online community, there was support for water treatment approaches that involved the development of wetlands, as these would **enhance local bio-diversity** (as well as potentially reducing the costs, pollution, and emissions associated with "hard engineering" solutions).

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AII

Customer behaviours and beliefs about the environment

What we already know (as at June 2016)

Most respondents to the Second Stage Environment study lived or worked near to a river or stream. Though relatively few household respondents regularly **take part in formal recreation activities** (swimming, boating, or fishing), most said they visited at least "a few times a year" to enjoy activities alongside or nearby a water source.

The Community Perception Survey of Anglian and Hartlepool customers run in 2015 (year one, wave two) found mixed views when it came to the statement "if a company had a poor ethical and environmental policy, it wouldn't stop me using them": 34% agreed; 32% disagreed and a further 34% neither agreed nor disagreed.

What's emerging (Autumn 2016 onwards)

As highlighted above, in the Community Perception Survey report for this year (2017/18), the research team conclude that there has been a large rise since last year in those customers that are focused on the environment. This year, 75% said they considered the environment in their day-to-day life (n=1405), a statistically significant increase over the 68% of customers who said this is 2015/16 and the 70% who said this in 2016/17. This year, 83% felt it was important for businesses to balance the needs of themselves, their customers, the local community and the environment (n=1404), reflecting similar results from previous years. Thirty seven percent agreed that if a company had a poor ethical and environmental policy it would stop them from using it (n=1384). Results for year one were 33% and year two were 38%. This year, the proportion of Hartlepool Water customers saying this was important to them increased.

The online community activities that explored customer views on Anglian Water's vehicle fleet found that the vast majority of customers were at least somewhat conscious of environmental concerns. The research found that a few customers felt that environmental changes should only be made if they are financially viable. However, a clear majority felt changes were worth making even if they were somewhat less than optimal in terms of their financial implications (although the researchers noted that this does not mean that any proposed changes would be accepted). The research found that a select few participants felt strongly enough about the environment that they believed it should be prioritised at any cost.

In the Water Resources Second Stage research, while 65% of non-household (business) customers said that water and sewerage services do not receive much management attention in their company, 41% of respondents said they were keenly interested in environmental issues. As highlighted elsewhere, in the initial, "package", set of questions, a desire to protect the environment was one of the key reasons both household and non-

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household customers gave for supporting the improved package (ranked second, after affordability, for both types of customer).

In the segmentation research, 45.6% of customers across the whole customer base strongly agreed that they **make environmentally friendly choices** in their day-to-day life (answering 9 or 10, where 10 is strongly agree). However, opinion was **divided among the customer base**, with just 26.1% of "tech savvies" (28% of the customer base) but 75.1% of "eco-economisers" (14% of the customer base) agreeing strongly with this statement. "Tech savvies" were also the least likely to be **interested in the environment** as an issue (51%) while co-economisers were much more likely to be interested (71%).

The segmentation research also found different views about **how finances should be raised for protecting the environment.** Across the whole customer base, 42% felt finances should be raised through the water bill, 37% opted for income tax, 8% didn't feel they should have to pay at all, and 12% said they didn't know. However, "eco-economisers" were more likely to favour paying through income tax (48%), and the "comfortable and caring" group were more likely to favour paying through their water bill (50%).

(See also the previous section for details of the study combining Anglian Water's customers' subjective preferences with their willingness to pay for river water improvements. This revealed **five statistically distinct viewpoints** that represent shared perpectives on issues about water quality and the riverine environment.)

AII

A Smaller Footprint

General views about a smaller footprint

What we already know (as at June 2016)

Participants in qualitative research and engagement activities demonstrated some awareness of and concern about **changing weather patterns**. However, it is somewhat unclear from available evidence how important **climate change** is to customers and stakeholders. It emerged as a crucially important issue in the Second Stage Water Resources (Stated Preference) study, but was ranked less prominently in a list of environmental issues in the Second Stage Environment study (the surveys asked slightly different questions). Across various qualitative research and engagement activities a minority of people questioned the evidence base for climate change and/or expressed a view that this has been over-played.

As is the case for outcomes on resilience and supply meets demand, participants in qualitative research and engagement made a link between efforts to tackle climate change and addressing leaks and conserving water already in the treatment system.

Many participants in qualitative research and engagement felt that **Anglian Water** should be taking steps to reduce its own carbon footprint, as the biggest consumer of energy and emitter of CO2 in the region. However, opinion was divided about whether the company had a leading role to play more widely.

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Respondents to the consultation were in favour of the company leading only if there are clear benefits for customers (though caution is required as findings are not representative).

Participants in qualitative research and engagement activities expressed support for the company taking a long-term view and **working in partnership** to tackle climate change and achieve carbon reduction (including by influencing their supply chain).

In the acceptability research, customers were asked to choose which three areas of Anglian Water's responsibilities they felt to be most important. **Helping to reduce carbon emissions and tackle climate change emerges as the second to last priority** (mentioned by just 7% of participants overall). It was more important to Hartlepool Water customers (44%) and future customers (20%).

Respondents to the Domestic Customer survey were asked to complete the investment simulator. The vast majority (83%) of respondents settled on choices that resulted in an increase in Anglian Water's carbon footprint; on average this was an increase of 5.94% from 493,000t to 522,295t. On average customers in socioeconomic group E (t529,996) settled for a higher carbon footprint compared with those in categories C1 (t520,244) and C2 (t517,110). On average single person householders (t530,719) also settled for a larger carbon footprint compared with households of five people or more (513,195).

Customers at the deliberative events showed **interest in water foot-printing**, and were keen to see information about this issue more widely disseminated.

What's emerging (Autumn 2016 onwards)

As highlighted elsewhere, most of the customers who have taken part in recent research and engagement activities have demonstrated some awareness of the threats to the water supply from **climate change**. However, across most of the activities a proportion of customers have either expressed **scepticism**, **or the view that this is not a pressing issue** (especially given other challenges customers are experiencing in life right now). Even those who accept the case for climate change often **struggle to see what they can do, personally, to help.**

Climate change was voted joint fourth (in order of importance) of the company's six major challenges in the acceptability research on the Strategic Direction Statement. Some customers who took part in the online community felt climate change is unavoidable, and others felt it was not Anglian Water's responsibilty to tackle alone.

Despite this general picture, some of the participants at the **future customer workshops** seemed to be very concerned about climate change, which they viewed as a "real" issue that needed to be taken seriously. Students at one workshop questioned why they didn't know very much about the impacts of climate change on the UK. They highlighted that their **coursework on climate change relates only to other countries.** The world focus groups also revealed that customers are often very **concerned about some of the issues that can flow from climate change**, such as flooding, if these are framed in such a way that

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customers can understand the potential impact on their own lives. (See Resilience, general views about resilience, and Resilience, investment in resilience for more details).

Students at one of the future customer workshops pointed out that it was important for Anglian Water to take steps to counteract its own carbon footprint, for example by protecting trees. However, various pieces of research suggest that Anglian Water's plans in the area of carbon reduction, energy neutrality and a circular economy are less important to customers than those in many other areas of the company's work, although they are still considered important.

In the acceptability research on the Strategic Direction Statement, A Smaller Footprint was ranked 9th out of 10 outcomes, voted as important by 74% of customers. (The highest ranking outcome was rated as important by 97% of customers, and lowest by 67%). When customers were introduced to Anglian Water's seven water quality and customer satisfaction goals (zero pollution and flooding, zero leakage and bursts, 80 litres per person per day, 100% complaint and chemical free drinking water, 100% customer satisfaction, energy neutrality, and a circular economy), energy neutrality was ranked 5th of the seven goals, voted as important by 77% of customers. (The highest ranking goal was rated as important by 95% of customers, and the lowest by 68%). Building a circular economy was ranked 6th of the seven goals, voted as important by 71% of customers.

In the same research, 11% of customers didn't understand something in the materials on these seven goals. This confusion mainly related to the 80 litres per person per day goal and the circular economy. Ten percent of customers felt some goals should be excluded. There was strongest support for excluding the 80 litres a day target (57% of these customers), followed by the circular economy (31%).

Quotes from customers who took part in the online community suggest some were supportive of the general idea behind developing a "circular economy", however some of these customers also found the term confusing or unclear.

In the August 2017 wave of the Community Perception Survey, customers were asked about the areas of Anglian Water's business performance that they were most interested in. Eighteen percent of (the 250) customers who answered this question, said they were **interested in the company's business performance relating to carbon** (the top choice was bills and affordability, selected by 53%, and the lowest was employees, chosen by 8%).

In the online community trial, the company's goal to "become a **carbon neutral business by 2050**" was seen to be "undeniably important" and a sensible part of any company's future strategy. However, it was most often **ranked third of Anglian Water's four long-term ambitions** (when resilience, sustainable growth, and digital transformation were considered). Although it was thought to impact not just on customers, but on the whole planet, it was **not felt to be as immediate and pressing an issue as the risk from flooding and droughts**.

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When (five of) Anglian Water's retail customers were asked to prioritise between Anglian Water's four long-term ambitions (with digital transformation replaced by improvements in ecological quality across the company's catchments), **becoming a carbon neutral business by 2050 was ranked last.**

Customers in the online community trial felt the company's ambition in relation to carbon neutrality seemed quite **vague and generic**. They wanted to know more about how the company will be offsetting their carbon footprint (and what is being offset and what is an actual reduction). Customers also felt that 33 years is a long time, and wanted to see some **specific milestones** to guide action along the way.

However, when customers in the online community were asked to predict what their lives might look like in the future (2050), they thought that **carbon would become an established category of products and services**, with carbon reduction encouraged through carbon taxes and incentives.

In the acceptability testing of Anglian Water's **performance commitments and outcome delivery incentives (ODIs),** of the company's bespoke commitments, **operational carbon and embodied carbon were ranked of middling importance** to both types of customer. Operational carbon was regarded as of high importance to 39% of household customers (ranked 5th of 11 commitments) and 51% of non-household customers (ranked 6th). Embodied carbon was regarded as of high importance to 37% of household customers (ranked 6th), and 45% of non-household customers (ranked 8th).

In the consultation on Anglian Water's draft PR19 plan with customers from the online community, participants were introduced to the company's aim to reduce the carbon emissions that result from construction projects, as a contribution to the long-term goal of being carbon neutral by 2050. Participants were told that maintaining and exceeding a reduction in capital carbon against the 2010 baseline is an on-going challenge. For AMP six, Anglian Water has further challenged itself to a 60% reduction, which is requiring a greater level of collaboration and innovation through the company's supply chain. In the draft PR19 plan, the company has outlined a proposed commitment level of 1% improvement year-on-year to 65% by 2025, across the full investment programme. Participants who took part in the consultation generally felt that the goal to be carbon-neutral by 2050 was significant and worthwhile, and the capital carbon stretch target felt ambitious and challenging. The focus on innovation and collaboration also felt positive. However, participants were keen to see more detail on what changes the company will be making over the next five years to meet the 10% operational carbon reduction target. Without more information about the day-to-day activities that impact on carbon emissions and what is being done about these, it was hard for customers to tell if this target was stretching or not.

In the acceptability research on the outline business plan, of the ten recycling measures tested, **embodied and operational carbon emerged as the two lowest priorities** (for both types of customer). Embodied carbon was rated as of high importance by 31% of household customers and 30% of non-household customers. Operational carbon was rated as of high importance by 25% of

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household customers and 31% of non-household customers. (The highest ranking measure for household customers was sewer collapses, on 87%, and for non-household customers, pollution, also on 87%). **Most customers felt the targets in the outline plan were sufficiently stretching**. For operational carbon, 61% of household and 79% of non-household customers agreed. For embodied carbon, 59% of household and 75% of non-household customers agreed.

It is worth noting that in the acceptability research, most customers understood the carbon measures. However, understanding **for embodied carbon was lowest of all the recycling measures** (88% among household customers, where the top ranking measure was understood by 98%, and 96% among non-household customers, where the top ranking measure was understood by 100%). Those household customers who understood the measure were significantly more likely than non-household customers to say they didn't know if it was sufficiently stretching or not.

Some of the customers who took part in the online community trial had a negative reaction to Anglian Water's plans "to understand how much water we use". They felt that a water company should already know exactly how much water they use.

Bioresources

Energy efficiency/alternative sources of energy (includes biosolids)

What we already know (as at June 2016)

Across several (qualitative and quantitative) evidence sources, both household and business customers, and stakeholders, express a clear concern about securing energy supplies and **developing cleaner sources of energy**.

Household customers at both deliberative events were generally supportive of the idea of **producing energy from waste or "bio-solids"** (provided plans were backed up with robust evidence).

What's emerging (Autumn 2016 onwards)

In one of the future customer workshops, when asked what Anglian Water should be doing to respond to climate change and population growth, participants suggested it should be **limiting emissions** (for example by encouraging use of public transport and car-shares), **re-using waste water and sewerage**, and **investing in alternative sources of energy**.

Quotes from customers who took part in the online community trial suggest some support for the **use of biosolids as fertiliser**, but also some concern (including potentially about the smell). In this wave of research and engagement, Anglian Water has commissioned **two dedicated pieces of research to explore customer views on biosolids in more detail**, and a further one on **sludge transport**. These found very **little awareness of biosolids** among customers, and **different levels of support for their use**.

The focus group on biosolids that was held with six Anglian Water customers in Sleaford found that there was **no spontaneous awareness of biosolids** or the company's role in their production. Discussion of the issue raised a number of

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questions in participants' minds, related to: what is included in the raw materials besides human waste; how the company ensures the products are safe; how products are moved around the region; and how much waste can be treated in this way. However, the focus group leaders found that once the process was explained to participants they felt comfortable with it and thought it was the right thing to do. For participants, the production of biosolids felt like a pragmatic and necessary course of action. The other options for dealing with waste (incineration and landfill) were viewed as unsustainable. Use of biosolids on the land was also regarded as more "natural" and less harmful than use of chemical pesticides. However, confidence in, and acceptance of, the process was related to trust in the quality and safety of the product.

Overall, the focus group found customers were pleased to see Anglian Water leading the way in the treatment of waste, and were impressed with the investment the company has made in this area to date. However, there was a mixed response to the question of how to communicate this area of work to other customers. Some participants felt this information should be actively shared, while others thought it was not a good idea, as they felt customers may not easily understand it at first. Despite a generally positive reaction to this area of the company's work, privatisation of the market in biosolids raised concerns, in particular that this could lead to a decline in the quality of the product.

Participants at the focus group were presented with six potential investment opportunities (within the biosolids area of Anglian Water's business) and asked how they might prioritise investment between them if they had £12m to spend. These areas were: maintaining a quality, trusted, product; building more capacity to deal with population growth; managing logistics to minimise negative impacts on the region (e.g. reformulation of the product to reduce the number of lorries on the road); producing renewable energy; opening up the market in biosolids (trading in biosolids across the regions, enabling new entrants to market); and creating smarter business operations (e.g. using automation to create efficiencies etc). Customers generally prioritised investment with more immediate impact: maintaining a quality product; building capacity for growth; and managing logistics to minimise negative impacts on the region. Other areas were given a lower priority. Smarter business operations was seen as something that the wider market would provide for anyway, without Anglian Water prioritising it. While there was support for arguments about the circular economy, investing in renewable energy was seen as less important than meeting the challenge of population growth. Potential benefits for Anglian with the opening up of markets in biosolids were overshadowed by concerns that new entrants to the market may produce a lower quality product.

Anglian Water commissioned a second piece of research on biosolids, with the online community, to explore the issue in more detail and, in particular, to investigate customer views on "micro-plastics" and waste.

This found that **the "plastic" discourse is now entering the mainstream**. Customers had quite a good awareness of some of the terminology as a result of recent media coverage and communications from major brands.

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Participants' immediate concern about plastics was about the environment, rather than human health. They were concerned about excess plastic ending up in landfill or in nature, creating pollution, affecting wildlife, and breaking down into small particles in the ground and in seas. Participants' worst-case scenario was that microplastics might end up in food chain.

Water companies were not spontaneously identified as being responsible for microplastics; instead participants tended to focus on the manufacturers who produce these materials in the first place, consumers who have been careless with their waste, and government who haven't always taken the action required to influence industry and educate the public.

The connection between processing of waste water and plastics was not spontaneously made. Participants tended to trust and expect water companies to keep water safe. Learning more about what gets filtered out during waste water processing raised new questions and concerns in customers' minds, and led them to place even more onus on Anglian Water to do a good job.

Seemingly in contrast to the focus group on biosolids, the online community activities found that **use of biosolids on land felt counter-intuitive to participants.** Customers questioned why this is happening when waste could be incinerated, why UK usage of biosolids is higher than elsewhere in Europe, and why microplastics can't be removed from biosolids. After hearing that microplastics do in fact enter the food chain, and may be ingested, participants had further questions about the **longer-term health impacts**. They wanted to know what research Anglian Water are undertaking to address the issue of plastics in soil and water.

Participants identified a number of **long-term solutions to the problem of microplastics**, involving: individual consumers making more environmentally-friendly choices about products and waste; a wider social movement designed to educate the public and take joint action (e.g. boycotting certain products); government intervention to incentivise recycling and exert influence over industry via taxation policy; and industry action to explore non-oil based, bio-degradable alternatives to plastic and to harness the power of brands for positive change. **Participants were keen to see water companies prioritising plastic-free water**, educating and informing the public, and lobbying and influencing stakeholders on behalf of customers.

Participants were open to changing their own behavior to address the issue of plastic in the environment, but they wanted to know more about what they should do. Participants had generally not considered the impact of clothing and road vehicles on the amount of plastic that gets into the environment, and were surprised to learn about this. Most had already decided not to use wet wipes (or were using them but disposing of them properly). Some were open to using a "filter bag" when washing clothes, but wanted to know which types of clothes need to go in it.

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Anglian Water commissioned a dedicated discussion on the online community to explore in more detail customer views about the **transportation of sludge**, an issue that had been raised in the previous two studies.

The online activities confirmed that sludge isn't something that customers have given much thought to before. However they were interested in the issues and keen to learn more about them.

Overall, the discussions revealed that participants supported efforts to re-use and recycle a waste product. This taps into sustainability ideas, and also feels like a sensible way for Anglian Water to recoup some of its own costs. More traditional approaches to dealing with waste, especially incineration and dumping at sea, provoked strong, negative reactions from participants.

Despite general support, however, **customers had a number of questions about sludge treatment and transport**, including: How do other companies deal with sludge? Why does sludge need to be transported in the first place? (Why can't it be treated, at least in part, on site?) How did Anglian Water settle on the "optimal" number of sewage treatment centres set out in the plan, and does this take into account higher future volumes of sludge with population growth? Why can't profits from selling sludge to farmers be used to build smaller treatment centres to minimise transportation between the 10 core centres? Customers also wanted to know whether they are currently **paying more in their bills to move sewage around**.

In thinking about sludge treatment and transport, balancing cost and environmental impact was top of mind for most customers. However, the research found some differences between segments in the issues customers were interested in and concerned about. "Protective provincials" were generally very pleased about the idea of financial savings from re-using sludge. Customers in the "tech savvy" and "comfortable and caring" segments wanted reassurance that road transportation is the most appropriate method at present, and that Anglian Water is open to considering alternatives if and when they might become available (e.g. electric vehicles). "Eco-economisers" and "careful budgeters" were keen on the idea of a "green enterprise", but wanted to know more about how safe and sustainable the transportation process is, whether there is a maximum distance for transportation that minimises the air pollution and environmental impact from using tankers, and the income Anglian Water generates from farmers and the grid (and how this is redistributed).

Overall, the research found that sludge transport was seen as a "necessary evil". In general, customers thought it made sense, and was a better solution than incineration or dumping at sea. They were also pleased to see that Anglian Water had put considerable thought into implementing the most sustainable solution. However, some customers were not convinced that road transport is the most efficient and sustainable solution. Customers were quick to come up with possible alternative, such as underground pipes (thought to be safer in the event of spillage), and rail and canal transport (seen as more carbon-efficient than road transport, although requiring more upfront infrastructure costs). The research found that most customers did eventually accept the road transportation

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solution, however they still had some concerns, including: whether fuel price rises might potentially off-set the financial benefits of using sludge; and whether with developments in technology the optimal solution may change. Customers **wanted Anglian Water to continue to investigate the best solution** from a cost and environmental point of view.

In the online discussions on sludge transport, and in other activities, the issue of **Anglian Water's vehicle fleet** has been highlighted by customers. In the online community trial, for example, while the company's plans to generate renewable energy were seen to be progressive, customers felt that not mentioning the vehicle fleet was a missed opportunity. Anglian Water therefore decided to commission a dedicated discussion on the online community to explore customer reactions to its **plans to develop a greener fleet**. (The company currently operates a fleet of over 1800 vehicles, the vast majority of which are run on diesel.)

This research found that a handful of customers had very little understanding of environmental issues, what it meant to be "carbon neutral", and what it would take to achieve this. A few customers had a very good understanding of the issues. **Most customers lacked a full understanding** of the potential benefits of electric cars and the practicalities of such vehicles, but applauded the idea and supported Anglian Water's efforts to become carbon neutral.

The research found that **few customers had already made the switch to electric vehicles themselves**. The two most common blocks identified were **cost and the paucity of charging stations**. Customers were "a little hazy" **about "hybrids"**, but generally understood these to be a "half-way" option, or a
first step in the right direction. Most customers were **unclear how much better these might be for the environment** than traditionally-fuelled vehicles.

Participants were almost unanimously supportive of Anglian Water's plans to create a greener fleet. Some customers emphasised that this was the kind of initiative that reflects well on Anglian Water and would improve customer opinion of the company more widely. Others saw it more as good practice, something Anglian Water is obligated to do, or a measure that is in its own interests (as it will save the company money in the longer-term).

Participants understood that there would be some investment required to make these changes. However **even the strongest supporters were mindful of the impact on customers' bills,** and were also keen to ensure that the current level of service would not be affected in the transition.

Participants were also mindful that they didn't have all the facts, and that the electric car industry is a new one. Some thought that there might be other environmentally-friendly measures that were more of a priority right now. Others felt that Anglian Water should avoid "jumping on the bandwagon" too early, and advocated taking small steps in the first instance — e.g. trialling a number of "additional" vehicles, with conventional ones available as back-up. A minority felt that action should be taken as soon as possible.

The research found that some more knowledgeable customers thought that "greener" diesel might currently be the best option, despite supporting

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	electric cars in principle. This was largely driven by concerns about the limited range for electric cars at present and the lack of charging points. Some customers also raised concerns about the impact on the national grid, and what might happen if there were a widespread power outage.
	Proposals for Anglian Water to set up new charging points and share these with the public positioned the company in a progressive light. However, some participants questioned how much practical benefit would really be derived from a limited number of such points.
All	Caring for Communities
	General views about caring for communities
	What we already know (as at June 2016)
	Robust survey evidence (McCallum Layton, 2015) shows that 80% of customers find it important that Anglian Water cares about the communities it serves. The survey also found that levels of awareness of Anglian Water's activities in this area were low . When they learnt about Anglian Water's activities in this area, this significantly increased levels of agreement that the company cares about the community. Customers called for more communication and promotion about this work to improve customer's opinions about this outcome.
	Participants involved in qualitative research and engagement activities also expressed surprise at the extent of the company's activities in this area. Some participants were strongly supportive of this activity; while others suggest
	it is less important than delivering high quality water, safely taking away the wastewater and tackling leaks. When asked to prioritise across all the outcomes, household customers at the deliberative events ranked this area lower than some

These findings were confirmed in the Acceptability research, where working with the community was seen to be the **least important aspect of Anglian Water's activities** (mentioned by just 2% of participants as a top three company responsibility). However, when asked to rate this outcome area on a five-point scale, around three quarters of customers still believed that caring for communities is an important outcome.

others (i.e. keeping bills affordable, providing safe drinking water, and tackling

What's emerging (Autumn 2016 onwards)

The **changing nature of community** emerged as one of eight, key themes across the customer world focus groups. The groups revealed that for some customers, community is now more strongly associated with their online life, or a particular interest group, than their local area. Many younger people don't feel they have a local community at all. However, this was not the case for all customer groups. The customer world focus groups found that first-generation migrants and retirees were most engaged locally. Various other strands of research and engagement found that many **customers in Hartlepool still have a strong sense**

leaks).

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of local community, however even here customers perceived that their communities were changing rapidly.

The Community Perception Survey asked customers who took part if they agreed with the statement "I am actively involved in supporting my local community". This year (2017/18), 30% agreed strongly (n=1389). The results for 2015/16 were 32% and 2016/17 were 27%. The proportion of Hartlepool Water customers saying this increased this year.

The segmentation research found that, across the customer base, 21.5% of customers strongly agreed that they liked to actively contribute to their local community, and 49.6% strongly agreed that they prefer to buy local products if given the chance (answering 9 or 10 out of 10, where 10 is strongly agree). However, there were some differences of opinion about these issues. For example, the "comfortable and caring" segment (26% of the customer base) were more likely to feel strongly about contributing to their local community (28.1%), and the "eco- economisers" (14% of the customer base) were were more likely to feel strongly about buying locally (64%). "Careful budgeters" (11% of the customer base) were less likely to strongly agree that they like to contribute to their local community (3.6%), and "tech savvies" (28% of the customer base) were less likely to strongly agree with buying locally (33.5%).

The co-creation workshops found that **collective**, **community-based approaches to water conservation and behaviour change** were appealing to some customers, for example, competitions pitting one local area or local school against another to save water. At the Horncastle co-creation event, which focused on customers who had recently experienced an outage, some customers (farmers in particular), were keen to develop community-based emergency solutions.

In the acceptability research, Caring for Communities was ranked 8th of the 10 outcomes in terms of importance, however it was still seen as important by 81% of customers. (The top ranking outcome was voted as important by 97% of customers, and the least important by 67%).

This year's Community Perception Survey report indicates that over the three years in which the survey has been run, **customers increasingly think it is important that Anglian Water cares about the communities it serves**. This year, 84% said they felt this was either very or fairly important (n=1383), a statistically significant increase over 2015/16 figures of 81%.

This year, 98% of Hartlepool Water customers felt it was either very or fairly important that the company cares about the communities it serves (n=28). This was significantly higher than for the core sample (83%, n=1051). The proportion of Hartlepool Water customers saying it was *very* important (85%), was significantly higher than the proportion of the core sample who said the same (37%). The proportion of vulnerable customers who said it was very important (59%) was also significantly higher than the proportion of the core sample who said this (n=304).

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As highlighted elsewhere, this year's Community Perception Survey found that spontaneous awareness of the company's activities in the community and in the environment remains low. Seventy eight percent said they were not aware of any such activities, or they didn't know, when they were asked about them unprompted. (Results for 2015/16 were 80%, and 2016/17 were 78%). However, spontanesous awareness of some activities (such as RiverCare, BeachCare and Rutland Water) increased this year (see a Flourishing Environment for more details). Customers in the "comfortable and caring" segment were most likely to be aware of Anglian Water's activities in this area. When customers were prompted with details of specific Anglian Water initiatives, 53% still said they had not heard of these programmes. (Results for 2015/16 were 56% and 2016/17 were 58%).

Asked near the start of the Community Perception Survey whether they felt that Anglian Water cares about the communities it serves (the outcome delivery incentive question), this year 55% agreed, either strongly or slightly (n=1196). This year's results show a recovery after a dip (to 52%) in 2016/17 (Results for 2015 were 56%). Asked again at the end of the survey, once customers had learnt about Anglian Water's activities in this area, 66% agreed, either strongly or slightly (n=1298. Results for 2015/16 were 63%, and 2016/17 were 62%). This year, when asked explicitly if their opinion of Anglian Water had improved after hearing about these activities, 67% of customers agreed, a statistically significant increase over the 63% who said this in 2015/16.

These findings appear to confirm results from the online community trial, where taking part in engagement activities raised the **profile and reputation of Water** as a forward-thinking and proactive company that cares about the communities it serves.

water water when customers were asked what improvements the company could make to demonstrate that it cares about the communities it serves, reflecting previous years' results the most popular response was to provide more information or communicate more, chosen by 28% (n=1421). (Results for 2015/16 were 25%, n=1447, and 2016/17 were 27%, n=1430). This suggestion was particularly important to customers of Hartlepool Water. Forty five percent of these customers gave this response (n=28), a significantly higher figure than for the core sample (29%, n=1080), which was itself a significantly higher figure than for the vulnerable group, (20%, n=313).

In the Community Perception Survey, just 7% of customers chose "lower prices" as the measure that would change their opinions of Anglian Water. However, this year's results were a statistically significant increase over 2016/17 results of 5%, and results for vulnerable customers (10%) were significantly higher than for the core sample (6%). Just 4% said repairing leaks quicker/more efficiently would improve their opinions of the company, however this was a significantly higher figure than in previous years of the survey (2%).

As outlined above, analysis of this year's Community Perception Survey found that perceptions of whether Anglian Water "cares for the environment" and is

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"socially responsible" were key drivers of customer responses to the caring for communities outcome delivery incentive. (In other words, these were the questions that most strongly correlated with responses to the overall question of whether Anglian Water cares about the communities it serves).

In this year's study, the research team plotted the different dimensions explored in the survey against their derived importance in terms of the ODI score and whether they are currently perceived as areas of high or low performance. This revealed **potential "hidden opportunities"**, or areas that are important in driving customers' ODI scores but where performance is currently regarded as lower. These included perceptions that the company: **treats customers as individuals**; **makes a significant contribution to the local economy**; **values me as a customer**; **is ethical and fair**; **and is considerate in the way it carries out work in the community**.

Overall, this year's survey results suggest that customers of Hartlepool Water are particularly positive about their company's activities in the community, with significant increases since 2015/16 in promoting water efficiency, being ethical and fair in doing business, and being a major employer.

The acceptability testing of the outline business plan appears to confirm findings from the Community Perception Survey. In this research, nearly 60% of household customers agreed or strongly agreed that Anglian Water cares about the communities it serves. Around 30% were neutral. Less than 10% disagreed. Customers of Hartlepool Water and Cambridge Water were significantly more likely to think that the company cares about the communities it serves than customers in the dual supply region. Customers in the "comfortable and caring", "family first" and "careful budgeter" segments were significantly more likely to strongly agree than "protective provincials". "Eco-economisers" were significantly more likely than all other segments to disagree or disagree strongly.

In the same research, 64% of non-household customers agreed or strongly agreed that Anglian Water cares about the communities it serves. A further quarter were neutral. Again, less than 10% disagreed. Customers from the "energy or water service and supply" sectors were significantly more likely to disagree strongly that Anglian Water cares about the communities it serves than those working in "wholesale and retail" and "other service activities".

Anglian Water commissioned a dedicated discussion with members of the online community to discuss its plans in the area of "social capital". The discussion found that the term "social capital" felt vague to participants. However, they were supportive of the company's commitment to contributing to local communities and to the environment. Participants were aware of various such initiatives from big brands, local councils, and supermarkets, and most expected large companies to be doing something to "give back" to customers and communities.

Participants identified a number of **defining features of social capital schemes**, including: a focus on local communities; giving something back for free that has a

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direct link with a company's core purpose (e.g. supermarkets working with local food banks); and an element of support for behavioural change.

Participants felt it was important that a **cross-section of the community benefits** from Anglian Water's efforts in this area, and that the company **focuses on local initiatives**. There was a concern that schemes may be restricted to big cities and coastal regions, meaning rural areas are left out. Reflecting findings from other research, discussions revealed **limited awareness of Anglian Water's existing initiatives**; customers felt it was important for the company to publicise what they're doing (especially as Anglian Water's social media pages are themselves recognised as a form of social capital). Participants expected social capital initiatives to have a **positive impact on Anglian Water as a company**, by improving it's public reputation as an educator and an organisation that brings communities together.

While some groups of customers were especially excited by the idea of social capital, others were more sceptical. Customers in the "family first" and "tech savvy" segments were the most aware of Anglian Water's existing initiatives, including its recreational facilities. They were most excited about using education and social media as tools for social change (e.g. customer open days and school events, and online guizzes). Customers in the "comfortable and caring" and "eco-economiser" segments were keen to see support for local community groups (e.g. small allotment grants, support for local clean-up groups), schemes focused on job opportunities for local young people (e.g. apprenticeships, sponsored college courses), and local environmental initiatives (e.g. partnerships with farmers to reduce the use of pesticides). Customers in the "protective provincial" and "careful budgeter" sgements were the most cynical about social capital schemes. They were concerned that these activities: go beyond Anglian Water's core remit; may shift the onus for environmental protection away from other agencies that are responsible for it; and will become something that customers will end up footing the bill for (a "charitable donation that they can't opt out of").

Participants were introduced to Anglian Water's **social capital and social impact aim**. The company's current initiatives in this area (e.g. Love to Help, RiverCare and BeachCare) are all measured in different ways. Participants were told that the company plans to **develop a new strategy**, alongside the PR19 business plan, and between 2020 and 2025 report on its implementation, using a new indicator set.

Generally, participants reacted positively to hearing about the new strategy. They were glad to see a large company taking the corporate social responsibility agenda seriously. This approach was also thought to demonstrate Anglian Water's commitment to being "future-facing". There was particular support for initiatives such as RiverCare and BeachCare, as they were seen to be clearly linked to Anglian Water's core purpose, as well as recent media coverage of issues such as plastics in water. However, some customers still felt that this activity went beyond what they expect from their water company. Others questioned what it was going to cost customers. It was pointed out that

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	this work may have unintended negative consequences, if it increases the financial burden on customers. Unlike the case for some of the other targets discussed on the online community, participants felt these initiatives could generally be managed within existing cost parameters, rather than requiring customers to pay more in their bill. Some participants questioned whether shareholders would allow the company to do a great deal in this area, if it didn't result in increased profits.
All	Anglian Water's schools programme
	What we already know (as at June 2016)
	The Community Perception Survey 2015 (year one, wave two) indicates that customer awareness of the schools programme is low, with just 9% indicating that they were aware of this activity even after being prompted with a list of activities.
	Evidence from qualitative and quantitative sources suggests there is a great deal of interest in and support for the company's schools' programme ; customers and stakeholders feel this work is very important in shaping a generation of future customers who will be more focused on water conservation.
	In the Second Stage Environment study, both business and household customers ranked teaching children in schools about water conservation and pollution second in a list of priority improvements relating to or impacting on the water environment (after reducing pollution and improving rivers and canals for wildlife). Some participants in qualitative research and engagement activities said they would like the schools programme to be expanded , or extended to different schools/groups of young people (including younger children).
	Customers who attended Anglian Water's customer forum open days in 2015 gave very positive feedback; with 80% rating it as "great' and 19% rating it as "good". The main suggestion was to increase the advertising and publicity around the events so that more customers could benefit from attending. On the theme of greater promotion, some suggested targeting children and young people in particular.
	What's emerging (Autumn 2016 onwards)
	Results from the Community Perception Survey confirm that customer awareness of the schools programme remains low . This year, just 9% of customers indicated that they were aware of this activity, even after being prompted with a list of activities. Results for 2015/16 were also 9%, and 2016/17 were 7%.
	However, as outlined above, at the co-creation workshops, customers expressed the view that targeting water conservation messages at the next generation would be sensible; children and young people were often regarded as the "educators" of the rest of the family. Customers were supportive of Anglian Water going into schools to launch competitions and show educational videos, and of

schools organising trips for children and young people to local water parks to

increase their understanding of the issues.

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	Participants at the future customer workshops were also strongly supportive of initiatives in schools and colleges; participants at one workshop wanted Anglian Water to work with exam boards and Government to build water conservation into the school curriculum.
	Customers who took part in the online community wanted Anglian Water to invest in expanding its education programme to teach more children about the importance of water and water conservation. The (six) customers who took part in the focus group on biosolids, (which initially explored general perceptions of Anglian Water and the service), also felt that educating school children/future generations was an important part of the company's activities, and that they should do more work in this area in future.
All	Recreation
	What we already know (as at June 2016)
	Most respondents to the Second Stage Environment (Stated Preference) study lived or worked near to a river or stream. Though relatively few household respondents regularly take part in formal recreation activities (swimming, boating, or fishing), most said they visited at least 'a few times a year' to enjoy activities alongside or nearby a water source.
	As highlighted above, nine out of ten household respondents to the Second Stage Water Resources (Stated Preference) study said they had a leisure activity likely to be affected by water shortages (car washing and maintaining gardens are commonly identified). This was less common for business respondents.
	In the Community Perception Survey 2015 (year one, wave two), despite four in five saying that they enjoy the countryside, only a third said they have visited one of Anglian Water's parks and nature reserves in the last five years.
	Among respondents to the consultation, there is support for Anglian Water's various recreation parks ; respondents particularly appreciate being able to use reservoirs for leisure activities. However, respondents also make suggestions for improvements to facilities; the cost of parking at some facilities was identified as a barrier to access. Survey evidence also indicates that customers would welcome more publicity about Anglian Water's parks and nature reserves, in order to encourage higher levels of use.
	What's emerging (Autumn 2016 onwards)
	In the Community Perception Survey customers were asked if they enjoyed spending leisure time in the countryside . This year, 79% of customers agreed, a consistent figure over time.
	The segmentation research found that enjoyment of spending leisure time in the countryside varies across the customer base. For example, "eco-

economisers" (14% of the customer base) were more likely to strongly agree that

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	they enjoyed this (76.3%) while careful budgeters (11% of the customer base) were less likely to do so (25.3%).
	In the Community Perception Survey, over four in five (85%) like the fact that Anglian Water offers recreational opportunities, whether they use they or not, with customers from the "eco-economiser" and "comfortable and caring" segments most likely to agree. However, the frequency of visits to Anglian Water's water parks and nature reserves is relatively low. Excluding Hartlepool Water customers, this year 54% of participants said they never visit. Just 22% said they visit at least once a year. Customers were asked for their suggestions for encouraging more visits to Anglian Water's parks and nature reserves. The most frequent result this year (n=1393) was "if they were nearer" (24%), followed by "nothing" (20%). More advertising and promotion was the most popular suggestion that Anglian Water can influence (17%). This year, 8% said "if I had more time", a significantly higher percentage than gave this response in 2015/16 (5%). Being able to access the sites, including by public transport, was a particular theme for vulnerable customers.
	As mentioned above, in the online community trial, customers highlighted Anglian Water's leisure facilities as a great way to get the message out about water conservation .
	As highlighted elsewhere, the study combining Anglian Water's customers' subjective preferences with their willingness to pay for river water improvements found that respondents generally had positive perceptions of river water quality . In the Q research, of the (45) respondents whose answers were included in the final analysis, 62% perceived the ecological and recreational quality of water at their most visited site to be of medium quality. Twenty two percent thought the ecological quality was high and 25% thought recreational quality was high. Only 3% of respondents felt that the ecological quality was low, and none of the respondents thought that recreational quality was low. (Thirteen percent, or 6 people, had no view about quality as they did not visit local rivers.)
	The authors found that, in line with previous research, respondents had higher willingness to pay for ecological rather than recreational improvements, although being a recreational user of rivers has a positive impact on willingness to pay for recreational water quality.
All	Anglian Water's impact on the community
	What we already know (as at June 2016)
	The Weather Brand Tracking Survey (Accent, 2014) found that 54% of customers think that Anglian Water acts responsibly or very responsibly in how it works in the community. When the tracking survey was repeated in three further waves over 2014 the results were more positive; with 66% responding in the same in

Wave two, 58% doing the same in Wave three and 62% doing the same in Wave

More recently, the Community Perception Survey 2015 (year one, wave two) found that 53% of customers agreed that Anglian Water is **considerate of the**

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community when working in the area, while a further 37% neither agreed nor disagreed with this statement.

Although this topic was not explored in depth in the sources reviewed, across a range of data sources the major complaint about the company's impact seems to relate to leaks in public places. Participants in qualitative research and engagement activities also mentioned a few isolated cases of bad smells from sewer treatment works; however this does not seem to be a major problem or one that these customers believe is that important. Annual Tracker data from the Consumer Council for Water shows that satisfaction with company responses on these issues is high and increasing. Just over three quarters of household respondents to the PR14 Willingness to Pay survey indicated that they were happy with the current level of service in this respect; similar proportions were found for non-household customers.

Robust survey evidence shows that 52% of customers agreed that Anglian Water is a major employer of local people, while 38% neither agreed nor disagreed. Some participants at the deliberative customer events and in the consultation were keen to emphasise that **local employment is one of the most important, positive, impacts the company has on the community**. Some respondents to the consultation felt there is more the company could do to help tackle unemployment in the region, especially for young people.

What's emerging (Autumn 2016 onwards)

As outlined above, the Willingness to Pay survey found that the majority of household customers have not experienced any problems with their water or sewerage services in the last five years (72%). Just 8% had experienced a problem with their sewerage service (n=1353, all subsamples, DCE and DWS surveys). Of the 113 respondents who had experienced a problem with their sewerage service, 39% (44 respondents) had experienced an unpleasant smell from sewage treatment works or sewers (the third most common problem). Of the 60 respondents who had experienced a problem with aspects of the service other than those relating to water or sewerage issues, 15% had experienced problems with roadworks associated with Anglian Water and 10% had experienced problems with the way the company had carried out repair work.

In the same survey, a smaller proportion of non-household customers had experienced no problems with their service in the past five years (55%). Fourteen percent had experienced a problem with their sewerage service, n=500, all subsamples, DCE survey). Of the 74 respondents who had experienced a problem with their sewerage service, 18% had experienced a problem with an unpleasant smell from sewerage treatment works or sewers. Of the 56 respondents who had experienced a problem with wider aspects of the service, just 7% had been inconvenienced by roadworks, and 5% by the way Anglian Water had carried out repairs.

Results from the initial, "package", set of questions asked of respondents to the Water Resources survey reveal that in the majority of cases, household

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customers had never experienced any service issues. However, **odour from sewerage treatment works was one of the more recently experienced issues** (12% had experienced this in the past year, while 21% had experienced low pressure and 2% received a boil notice). A similar percentage of non-household customers had experienced this in the past year (11%).

In the Community Perception Survey customers were asked if they felt **Anglian Water manages its sites responsibly**. This year, 56% of customers agreed (n=1082). Results for 2015/16 were 59% and 2016/17 were 57%. This year, 55% of customers agreed that the company is **socially responsible** (n=1169). Fifty two percent agreed that the company is **considerate of the community in the way it carries out work in their local area** (n=1207). In a new question that was asked for the first time in December 2017, customers were asked if they felt **Anglian Water considers the impact on people's travel when carrying out work in the street**. Results for the two waves of research that have included this question so far found that 43% of participants agreed (n=582).

As outlined above, analysis of this year's Community Perception Survey found that perceptions of whether Anglian Water "cares for the environment" and is "socially responsible" were key drivers of customer responses to the caring for communities outcome delivery incentive. (In other words, these were the questions that most strongly correlated with responses to the overall question of whether Anglian Water cares about the communities it serves).

In the online community trial, Anglian Water's **commitments to be a good neighbour** (by reducing disruptions) were considered laudable. However, some customers were sceptical about the extent to which this would be possible in practice.

The analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that the issues of **repairs and traffic** performed fairly highly in terms of the key metrics used in the study. Repairs was ranked third as a topic in terms of the volume of communications and its reach, and fourth in terms of engagement. This topic featured in 644 conversations during the study period, with a potential reach of 157K people. It was a **particularly contentious topic, driven by customers tweeting frustrations about faults**. Slow restoration times led to most complaints, with around 7% of mentions specifically requesting updates.

As highlighted above, in the online community activities focused on sewerage rehabilitation, a majority of (the 20) customers who took part had experienced some form of pipe-related disruption. Service cuts felt like the most severe type of disruption, and customers expected these to only last a few hours. However, although inconvenient, customers felt they are generally well-managed. Noise was regarded as an inevitable consequence of work being conducted, and was not regarded as a major issue, as it usually occurs in working hours. However, road closures and traffic disruption were regarded as the worst side-effects of work taking place (particularly for those who rely on public transport, and for people with disabilities).

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The research suggests that how works and disruption are managed affects levels of customer frustration. Customers **feel least frustrated** when: they've been informed well ahead of work starting, allowing them to plan accordingly; they've been kept updated of any changes to timings; and when traffic continues to flow, even if major junctions are closed. Customers **feel most frustrated** when: they feel that a road closure was not planned in advance; major closures feel like they haven't been managed properly; and when closures go on for weeks, without a clear end date, and with **little visibility of work actually taking place**.

The question of **how best to schedule works** so as to minimise disruption felt complicated to customers. Generally, they had a preference for work to be carried out in intensive periods. In comparison to shorter bursts of activity over a longer period, customers felt such an approach is easier to communicate and more efficient and cost-effective. However, customers recognised that the appropriateness of the approach will depend on the circumstances. For example, it may be less disruptive to spread works over a longer period of time in some high access areas (such as outside a school).

Customers made a number of suggestions for **improving communications** about pipe-related disruption, including: more tailored information (with just the essential facts provided to all and more information available if people are interested); better use of on street signage (including digital signs that can be updated); and more information on why workers may not be on site.

As highlighted above, despite concerns about pipe-related disruption, the valuation research on flooding and roadworks found that the wellbeing impact per incident for flooding is considerably higher than for roadworks. (The wellbeing impact value for the aggregate "all types of flooding" category is more than 10 times the average value for roadwork incidents). The research team suggest that while roadworks represent a disturbance to people's quality of life that is more frequent in nature, roadworks have less impact per incident. In contrast, flooding is less frequent but has more impact when it occurs. The valuation research also found that flooding and roadworks values per incident were higher in urban than rural areas. This is largely because there tend to be a significantly higher number of households living nearby to an incident in urban areas, due to greater population density.

In the Community Perception Survey, customers were asked if they agreed with the statement "Anglian Water is a major employer of local people". This year, 54% agreed (n=1052), with the percentage of Hartlepool Water customers agreeing to this increasing. However, over the same period, just 5% of customers, when prompted, said they were aware of initiatives to support youth employment. (Although low, this year's figure was significantly higher than the corresponding figure for 2015/16, of 3%).

Customers who took part in the online community trial felt that commitments to foster talent and address the skills gap demonstrate that Anglian Water cares about its local community. There was support for the various schemes and

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	initiatives described to customers. Some customers wanted to know more about these.
	In the online community trial customers also expressed support for Anglian Water's goals in relation to workplace safety and wellbeing . However, some customers wanted more detail about how accidents will be reduced in practice.
	In the Community Perception Survey, customers were asked if they agreed with the statement: "Anglian Water takes health and safety seriously". This year, 67% agreed (n=1158), a significant increase over 2016/17 results of 63%.
All	Investing For Tomorrow (includes inter-generational issues)
	General views about investing for tomorrow
	What we already know (as at June 2016)
	Participants who took part in qualitative research and engagement activities expressed general support for the company planning ahead and maintaining and investing in infrastructure , in order to safeguard the service and prevent costs storing up for the future. Investing in infrastructure and good stewardship of assets was seen as a core responsibility of the company.
	However, this was also the area that participants in qualitative research and engagement activities found the most difficult to comment on . There was a widespread feeling that it is Anglian Water's job to determine appropriate levels of investment , drawing on their expert understanding. A few people wanted further information on how the company makes investment decisions, to enable them to comment further.
	Participants in qualitative research and engagement activities tended to link debates about the appropriate level and pace of investment in infrastructure to Anglian Water's profits. It was common for participants to state that Anglian Water should be investing more in assets themselves rather than asking customers to fund this (especially as investment was seen to be in the company's own long-term commercial interests). Those people who accepted customers may have to pay more were keen to ensure that the potential impact on customer bills was minimised.
	In the (limited) available, qualitative evidence, it is not very clear the extent to which current customers are prepared to pay now for benefits which will be enjoyed by future customers .
	In the Domestic Customer survey, respondents were asked to complete the investment simulator. Current and future maintenance emerged as customers' second priority for investment after leaks (based on a combination of the percentage of customers who chose to increase spend and the percentage of the total available envelope they selected). Fifty six percent of customers indicated that they would support an increase in investment in maintenance from the pre-

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set level. The average level of investment selected was 61% of the possible total available envelope. On average customers from single-person households opted for a higher level of investment in maintenance of assets compared with larger households. On average customers who were "very satisfied" with the overall value for money Anglian Water provides opted for a higher level of investment in maintenance compared with those who were neither satisfied nor dissatisfied. When asked which (of a list of) aspects would increase satisfaction with value for money of the service, current and future maintenance emerged as the 5th most popular choice (of 11 options), selected by 34% of respondents.

What's emerging (Autumn 2016 onwards)

The customer world focus groups identified that, for many customers, **imagining** the future is a difficult and sometimes worrying task. The pressures of everyday life mean many customers are focused on getting through the next few weeks or months. The focus group leaders concluded that Anglian Water needs to find ways to show how planning for the future will make things better for customers today.

In the acceptability research on the Strategic Direction Statement, **Investing for Tomorrow was ranked 7**th **out of 10 outcomes**, voted as important by 82% of customers. (The top-ranking outcome was voted as important by 97% of customers, and the lowest by 67%). **However, planning for the future was ranked 2**nd **out of six major challenges** facing the company, voted as important by 86% of customers. (The top-ranking challenge was seen as important by 89% of customers, and the lowest ranking by 52%).

Participants at one of the future customer workshops felt that investing for the future **should be** *the* **key consideration for the company**. Some customers who took part in qualitative interviews for the segmentation research highlighted the current, **poor state of repair of some ageing assets** as one of the pressures on the water system that they were most concerned about. This was also a concern for customers who took part in the online community. They felt it was important for Anglian Water to focus on improving old and dated infrastructure to prevent leaks and damage. The focus group with customers in Hartlepool also found that although the company was trusted and well-liked, participants felt there was more it could do to prepare the infrastructure for the future.

Customers who took part in the online community trial felt it was refreshing that Anglian Water was being honest about the need to renew assets. Some customers were keen to receive more information about Anglian Water's plans and targets for asset renewal, and how renewal efforts will affect their bill. However, while participants in the online community activities on financial fairness appreciated Anglian Water's efforts to be transparent and forthcoming with information about its investment strategy, some felt this information did not need to be actively "broadcast" to all customers. The researchers concluded that, by and large, customers trusted Anglian Water to "just get on with managing their assets" in the best way they can.

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In the online community trial, there was support for the **Water Innovation Network** and the **Newmarket Shop Window.** These initiatives were thought to feel unique and demonstrate Anglian Water's commitment to **thinking ahead and collaborating with others** in pursuit of improvement to the infrastructure. Quotes from customers who took part suggest some would like further information about the company's innovation initiatives, including some specific examples of how they are being put into practice.

In several pieces of recent research, customers were presented with a range of scenarios for the future, each of which featured a different level of investment in major infrastructure improvements and/or resilience measures, along with a corresponding bill impact. They were then asked to choose between these scenarios. Findings from these studies suggest that most customers support options that involve "going beyond the minimum" to invest for the future. However, uncertainty about future risks, and affordability considerations, mean that not all customers support the maximum level of investment under consideration.

In the online activities on water resource management, household customers were presented with three investment options for the future: protecting against drought but not climate change (costing £2.20 extra per customer per year by 2025); protecting against drought and climate change (costing £8.30 per customer per year by 2025); and future-proofing plans by building larger water system capacity than is needed right now to protect against climate change risk (costing £10 per customer per year by 2025). This research found that the future-proofing option garnered the most support. In the context of the annual bill, £10 did not feel like a great deal of money to protect the water system against future risks. The research found that although climate change was not universally accepted, option three felt like a substantial investment in the infrastructure, which customers thought would also help in the context of housing growth in the region. The research found some differences in opinion between customer segments on this topic with, for example, the "family first" group slightly more keen on investing just in climate change, and "eco-economisers" in drought-only options or in doing nothing.

In the second Community Research study on vulnerability (which explored customer reactions to Anglian Water's draft PR19 business plan), customers were introduced to three (differently framed) options for investment, with associated bill impacts. Assuming an average household bill of £412 in 2019-2020, with efficiency savings of £16, the options were: minimal additional investment in climate change and environmental improvement (resulting in likely annual bills of £455 in 2025, including inflation); additional investment in climate change *or* environmental improvement (leading to likely annual bills of £466 in 2025, including inflation); or additional investment in climate change *and* environmental improvement (leading to likely annual bills of £478 in 2025, including inflation). For each option, customers were asked to factor in a possible £20 reward or penalty (resulting in a corresponding decrease or increase in the bill) for reducing leakage, at the cost of £4 per household per year. Overall, the **majority of participants preferred the**

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second option (additional investment in *either* climate change or environmental improvement). This was seen as a good balance between taking some preventative action, while keeping cost rises under control, and recognising the uncertainty around the possible impacts of climate change. In most groups, there was strong minority support for option one (minimal additional investment), primarily on the basis of affordability. In half of the groups, there was strong minority support for option three (investment in both areas). Participants supporting this option felt the company needed to act now in relation to climate change and environmental protection; some hoped significant investment now might head off sharp bill increases in future. The majority of participants also supported the £4 charge to support improvements in leakage, as they didn't want water going to waste and felt the additional cost was minimal. The research found some differences in levels of support for these options among different groups of customers. Older people (in Skegness) were especially sensitive to the cost of living and rising prices, in the context of limited increases in the value of their pensions. Affordability was also an issue of particular concern in the groups held with young women (in Ipswich) and those on low-incomes (in Corby and Hartlepool).

hartlepool were presented with a different bill profile, with smaller projected bill increases (partly due to Hartlepool Water sourcing most of its water from boreholes). These assumed an average bill in 2019-20 of £356, with efficiency savings of £11. The bill profiles were then (including inflation): option one, £381; option two, £387; and option three, £396. The same potential reward/penalty applied for performance on leakage. The research found that **low income participants in Hartlepool were more open to the options involving proportionately greater investment.** Even though participants expressed concerns about rising bills, by the end of the discussions, none of them chose the first option, and equal numbers chose options two and three. However, after agreeing to pay for option three, some customers felt it was a bit much for Anglian Water to ask them for an additional £4 to pay for leakage improvements. There was least support for this in the Hartlepool Water focus group.

In a poll carried out as part of the consultation exercise on the draft PR19 plan with members of the online community, participants were again presented with three scenarios: a minimum investment scenario, with an associated annual bill of £412; a scenario in which the company invests in *either* environmental improvements *or* climate change, with a bill of £422; and a scenario in which they invest in *both*, with an annual bill of £433. Overall, **most customers supported option three** (the maximum investment position). This was thought to be the best option by most participants as it covered all the important issues, felt the most ethical and socially responsible, and offered much more in terms of benefits than the middle option (with only a small increase in cost). The first option was generally viewed as false economy (deferring issues rather than dealing with them now). The second option felt like a moderate, cautious and cost-effective approach to some, but felt short-sighted to others. However, while generally supporting option three, some customers questioned how accurately Anglian Water can forecast the

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future and how much flexibility there is to change tack if necessary. Some participants said that if they had been given the choice, they might have preferred a course of action between options two and three. Confirming the results of other research, a majority of customers supported the proposed additional investment in leakage. The notion of Anglian Water investing more to continue to be a leader in this area was popular. However, participants didn't want to see their bills continue to rise simply because the company wants to "be the best". The proposal was supported so long as the additional investment was around £4 per household per year. A potential rise of £20 felt too high.

Various pieces of research have explored in more detail customer views about the phasing of investment, and how the costs should be shared between current and future customers. Generally, this evidence seems to suggest more customers support investing and making payments earlier, however sizeable proportions of customers disagree.

all In the acceptability research on the outline PR19 business plan, customers from the online community were again presented with three potential investment scenarios, with associated bill increases. In the first scenario, customers were told there would be no potential bill increase over the period 2020-2025, but investments would be deferred, which could make them more costly in future. After 10 years, customer bills will have risen from an average of £412 to £433 to pay for the investments needed. In the second scenario, there would be a potential increase of £10 over 2020-2025 that would allow some but not all investments to be made (with some of the costs to be applied to customers' bills at a later date). After 10 years, customer bills will have risen from £422 to £433. In the third scenario, there would be a potential increase of £21 in the average bill over the period 2020-2025 that would allow Anglian Water to implement all of the investments set out in their business plan. From 2026-2030 bills would stay at £433, as all required investments will have been made and paid for over the previous five years. Overall, the research found that more customers preferred to have all investments made and paid for over AMP 7. Among household customers, between 44%-65% supported this option, depending on the company/region. Cambridge Water customers were significantly more likely than Anglian and Essex & Suffolk Water customers to support the £21 increase (65% as opposed to 44% and 48%). Customers in the "family first" and "comfortable and caring" segments were significantly more likely than other segments to support the £21 increase. Similar results were found for non-household customers. More than half (53%) supported the £21 increase, and these results were unanimous across businesses of all sizes.

Participants who took part in the online community activities on financial fairness were introduced to **Anglian Water's past strategy of keeping current bills low**, by spreading the cost of assets over their lifetime. They were then informed that with new technology the lifetime of assets is shortening, and the company is therefore proposing a new strategy. This aims to **avoid costs being unfairly placed on future generations by ensuring current customers pay their fair share.** The research found that although customers' interest in, and ability to,

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discuss financial investments varied widely, most understood why the company wanted to change their strategy. Most customers appreciated that the nature of the company's assets had changed and supported paying them off sooner. The research found that the small group of customers who were very knowledgeable about financial matters were strongly supportive of "sensible amortising". The "handful" of customers who didn't approve of the strategy only did so when they didn't fully understand it. However, although the research found that Anglian Water's proposed new strategy was generally perceived as sensible and fair, customers were concerned with asset longevity, and were keen to see assets used to their full potential before being replaced. (The researchers suggested that Anglian Water might need to do more to explain why assets need to be replaced, e.g. for employee safety, or to counter cybersecurity threats etc). The research also found that some customers felt the changing nature of the asset base is an issue for Anglian Water and its shareholders to deal with, rather than customers.

The consultation on the draft PR19 plan with the online community also found that the majority of participants (68%) backed a "pay as you go" approach to asset investment (however note this is not robust quantitative research). They felt it was fairest to spread the cost of investment across current and future customers, rather than for future generations or current customers alone to foot the bill. However, participants still felt that it was important to build in sufficient flexibility to be able to "wait and see" what the future holds. Some participants emphasised that it is very difficult for Anglian Water to predict the future, especially given Brexit and likely changes in government policy. Some participants also had concerns that if customers were asked to pay more upfront it will go into shareholders' pockets. Others felt that it was unfair for a smaller current customer base to be asked to pay so much when, in proportion, future customers will pay less, as costs are shared among a larger number of people.

In some pieces of research, customers were asked more explicitly about their sense of responsibility to future generations, including if they were **willing to pay more now to protect future customers**, and results are mixed.

At the end of the Willingness to Pay survey, customers were asked some follow up questions about the health and resilience of the water and sewerage infrastructure. Overall, there was strong support for maintaining asset health and ensuring there is resilience in the network. Eighty three percent of household customers indicated that they strongly agreed or tended to agree with statements concerning the pro-active replacement of pipes and sewers to avoid storing up problems for future generations, and the same percentage agreed that it was important to ensure there is spare capacity in the system to deal with problems like extreme floods, power outages, and long periods of drought. However, there was lower support for favouring long-term investments over those that deliver benefits in the next five years (52%), and just 37% agreed that it is right that customers should pay more today to help ensure future customers do not experience worse levels of service, with much less

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distinction on this question between those that were neutral (32%) and those that disagreed (29%, n=1353, combined subsamples, DCE and BWS surveys).

The Willingness to Pay survey indicated that there is also strong support among non-household customers for pro-active replacement of pipes and sewers (80%) and ensuring there is sufficient capacity and back-up measures in the system (82%). The level of support for longer-term investments over those that deliver short term benefits was again lower but a little higher than it was among household customers (58%). Fewer non-household customers opposed paying more today for the benefit of future customers (21%, compared to 29% of household customers, n=500, all subsamples.)

In the Water Resources Second Stage survey "package" exercise, when asked for their reasons for supporting a set of service improvements, a desire to invest in improvements that will benefit future generations emerged as a middle-ranking response, receiving 12% of household and 11% of non-household responses. (The top choice was that the bill increase is affordable, receiving 18% of household and 19% of non-household responses, and the bottom was that my household/organisation is happy to pay for improvements that benefit other customers, at 4% and 7% respectively).

The segmentation research found that across the whole customer sample 62% gave a positive response to the question about being **willing to pay more to secure water supplies for future generations** (answering 6-10, where 10 is strongly agree), and 22.8% strongly agreed (answering 9 or 10). However, the research suggests some **differences in opinion** on this topic across the customer base. For example, the "comfortable and caring" group (26% of the customer base, more likely to be social class AB and 55+) were more likely to strongly agree with this statement (37.6%), while the "eco-economisers" (14% of the customer base, also more likely to be 55+) were less likely to do so (2.9%).

The study combining Anglian Water's customers' subjective preferences with their willingness to pay for river water improvements revealed **five statistically distinct viewpoints** that represent shared perpectives on issues about water quality and the riverine environment. The different viewpoints **include different attitudes to inter-generational equity**. For example, those respondents who share **viewpoint one**, ("**ethical and ecological concerns are paramount"**), display a high degree of inter-generational regard; they believe that rivers should be protected for our children and our children's children to enjoy. The research found **significant differences in respondents' choice behaviour**, **attributable solely to their subjective preferences**.

The **consultation on Anglian Water's draft PR19 plan** with customers from the online community found that, overall, participants supported the plan. Customers were **reassured that leaks/bursts are being tackled**, as well as other issues that impact directly on customers, such as sewer flooding, and that the plan places greater focus on highly valued environmental protection. Reviewing the plan

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reassured customers that Anglian Water has thoroughly planned for the next five years.

In the same research, participants were told that **sometimes water treatment** works are not able to perform at the capacity for which they were designed. Although in most instances customers are not affected by this reduction in capacity, the company is keen to include a new measure in this area to provide a picture of the **long-term resilience of water treatment works**. Anglian Water is proposing to do a piece of work to understand current performance, and the plan is then to maintain this in the next planning period. The consultation found that participants generally felt **informed and reassured** that Anglian Water is doing all it can to minimise the impact on customers. Participants generally accepted that the company is building its understanding of the issues through more research, although some questioned why this data wasn't available already and why zero incidents is not the aim.

Treatment works compliance was also explored in the acceptability research on the outline business plan. Of six areas that span water and waste services (mains bursts, external sewer flooding, water treatment works and water recycling centre compliance, low pressure, unplanned outages, and sewer collapses), water treatment works and water recycling centre compliance was ranked of middling importance to customers (average score of 3.54 from household and 3.07 from non-household customers, on a scale from one-six, where six is most important). Of the water measures in the plan, treatment works compliance again emerges as a middling priority, of high importance to 57% of household customers (top ranking measure was mains bursts on 82%) and 50% of non-household customers (top ranking measure was mains bursts on 81%). Most customers felt the targets on treatment works compliance were sufficiently stretching (76% of all household and 88% of all non-household customers). Household customers who understood the measure were significantly more likely than non-household customers to say that they didn't know if the target was sufficiently stretching or not.

Participants who took part in the online consultation on the draft PR19 plan were also introduced to plans to **reduce the number of sewer collapses**. Customers were told that there are some limitations to the comparative information available in this area, due to the adoption of private sewers by water companies (historically Anglian Water has reported on this metric in a different way to other companies). The company has considered historic data and what continued improvement would entail to suggest a commitment level of 416 collapses by 2025, a reduction on expected performance of 474 in 2020. Customers were told this is stretching, because of the number of private sewers recently taken over that are in a poor state of repair and other factors such as the weather. The proposal includes a "deadband" of 100 collapses a year, based on previous deadbands set by Ofwat. The consultation found that **customers felt the reduction was a step in the right direction,** and most accepted the challenges of working with newly acquired pipe network. However, **some felt the deadband buffer seemed high**. It was hard to get a sense of whether the target was stretching without comparative data.

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Sewer collapses were also explored in the acceptability testing of the outline business plan. Of six areas that span water and waste services (highlighted above), sewer collapses were ranked of high importance to customers, second only to mains bursts (average score of 4.32 from household and 4.09 from non-household customers, on a scale from one-six, where six is most important). Of the recyling measures in the plan, sewer collapses emerges as the top priority for household customers (87% said it was of high importance), and second to top priority for non-household customers (85% after pollution on 87%). Most customers felt the targets on sewer collapses were sufficiently stretching (58% of all household and 67% of all non-household customers). However, the proportion of customers agreeing was lower than for many other recycling measures. Household customers who understood the measure were significantly more likely than non-household customers to say that they didn't know if the target was sufficiently stretching or not.

In the consultation on the draft PR19 plan with members of the online community, customers were also introduced to the company's plans to reduce total mains bursts. They were told that there is limited good comparative data to set a target in this area, so Anglian Water has considered their own historic data and what continued improvement would entail to set a performance commitment level. Based on improving performance over the last five years, Anglian Water is proposing a commitment level of 4720 bursts by 2025, an improvement on expected performance by 2020 of 4800 bursts (average performance since 2000 has been 5093 each year). This proposed performance is equivalent to a level of mains replacement that is greater than the current industry average. Customers were told that reducing leakage is a top company priority, and one of the best ways to reduce leakage is to find and fix burst mains. However, any leaks that are found from burst mains will count against this measure and worsen performance. Performance will also be affected by the weather. For these reasons, Anglian Water is proposing a deadband based on the rate of improvement in targets previously set by Ofwat (4952 bursts for 2025). The consultation found that participants liked the idea of the company actively seeking out problems and addressing the needs of a deteriorating network. However, in the context of a shift from 5093-4800 in 2020, the target of 4720 by 2025 didn't feel that ambitious.

Participants in the online consultation on the draft plan were also introduced to **Anglian Water's aims in relation to reactive mains bursts (bursts identified by public or third parties).** They were told that the company's best ever performance for this was 3063 bursts (per thousand kilometers), and this is the proposed stretch level in the PR19 plan. (Last year, the company had 3363 bursts.) Due to the potential impact of poor weather, the company also proposed a buffer based on historic average performance, of 4197. The consultation found that participants felt this was a **credible commitment**. Reference to the "best ever" performance felt relatable. Participants also generally accepted that weather will have an impact on performance. However, some questioned whether a preventative approach rather than a remedial one was required. Some

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	also queried the relationship between having a stretching commitment but a fairly large deadband buffer.
	The acceptability research on the outline business plan also explored customer reactions to Anglian Water's plans and targets for bursts. When asked to prioritise between six areas that spanned water and waste services (outlined above), both household and non-household customers ranked water mains bursts of greatest importance (average score was 4.85 for households and 5.20 for non-households, on a scale of one-six, where six is most important). Of the water measures in the plan, mains bursts also emerged as the most important measure (judged to be of high importance by 82% of household and 81% of non-household customers), followed by leakage (68% and 79%), and reactive mains bursts (65% and 71%). Most customers felt the targets in this area were sufficiently stretching, however, targets for leakage were regarded as stretching by more customers (80% of household and 83% of non-household customers) than mains bursts (65% and 69%) and reactive mains bursts (69% and 76%). Reactive bursts were ranked 8th and mains bursts 10th of 12 measures, in terms of perceived stretch by households. They were ranked 10th and 12th by non-household customers. Household customers who understood the measures, were significantly more likely than non-household customers to say that they didn't know if targets for mains bursts and reactive bursts were sufficiently stretching.
Water distribution, Sewerage collection	Pipes surrounding properties
	What we already know (as at June 2016) Some participants in qualitative research and engagement activities expressed confusion about who was responsible for maintenance of the pipes surrounding their property (Anglian Water or the householder themselves); these findings were reflected in the Consumer Council for Water Annual Tracker survey. Opinion was also divided about the insurance scheme on offer from Anglian

gagement activities expressed maintenance of the pipes ouseholder themselves); these r Water Annual Tracker survey. Opinion was also divided about the insurance scheme on offer from Anglian Water; some people felt the scheme was very helpful, while others disliked receiving "cold calls" from the company.

Similarly, a national survey exploring views about supply pipe ownership commissioned by the Consumer Council for Water found that awareness about who was currently responsible for the supply pipe was mixed.

The same survey also found that the transfer of ownership/responsibility to the water company was well received by households, businesses and affected parties and that this option was significantly more acceptable than the current arrangement. Regional differences, differences between water companies or those between different segments of customer were not provided.

What's emerging (Autumn 2016 onwards)

As highlighted above, Anglian Water has recently been trialling take up of a scheme to incentivise customers to replace lead pipes surrounding their properties, as part of the company's pipe replacement programme. The scheme

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	offers customers a one-off contribution of £375 towards the cost of replacing the pipes that run from the boundary of their property to the point of entry to their home (the average cost of replacing a water pipe is £500-£1000). The scheme focused on three areas in Norwich (as five of Norwich's public water supply zones feature in the top 10 of 164 zones on the company's risk assessment, and customers there have been proactive in engaging on this issue in the past). One of the areas included social housing, while the others were more affluent (six hundred properties were targeted in total).
	Customers in the affected areas were: invited to a drop in session (14 attended); provided with an initial letter about planned work a month before this started (including a lead leaflet and a leaflet about the incentivisation scheme); and provided with another letter (and another copy of the incentivisation leaflet) two days before work started. (These communications were hand-delivered to people's properties). In addition, any customer who requested a lead test was reminded of the incentivisation scheme (with a leaflet included in their results letter). At the end of the work, customers were also given a survey card to post back, which included information on the pipework observed at the boundary of their property.
	Only three customers have taken up Anglian Water's incentivisation offer (as at September 2017); all from the more affluent areas in which the programme was run. Feedback provided to the Anglian Water staff lead on this programme suggests customers feel work is too expensive and will cause too much disruption (however, this feedback has not not been reviewed as part of this synthesis report).
	Quotes from customers who took part in the online community suggest that there is some support for attempts to replace lead pipes, but customers also recognise that this is a large and expensive task. Quotes suggest some customers would like more information about targets and timescales in this area. Others would like more information about the support on offer to help customers to know if they have lead pipes and to access financial assistance to replace them.
	On the Anglian Water bus, one of the voting stations explored what steps customers were prepared to take to protect water quality in their own home . The top choice selected by the 1346 customers who took part was to carefully choose kitchen appliances (37%), followed by replacing lead pipes (34%), and always using a "water safe" plumber (29%). (However, note, this was not robust quantitative research that provides accurate insight into the distribution of views across the customer base).
All	Fair Profits General views about ownership and management of the company What we already know (as at June 2016)

Relevant To Business Portfolio

Topic Area & Customer Evidence

Among participants in qualitative research and engagement there was a range of understanding about how the company was managed and governed; businesses and stakeholders were generally better informed than household customers

Among participants in qualitative research and engagement, some customers are strongly against **private ownership** of water companies; more are concerned about **monopoly status** (that the absence of competition means the company has no incentive to keep prices affordable and continuously strive to improve the service). Some customers involved in qualitative research and engagement activities express concern about **foreign ownership** of the company.

In the Community Perception Survey 2015 (year one, wave two), 82% of respondents agreed that it is important for businesses to **balance the needs** of themselves, their customers, their local community and the environment.

What's emerging (Autumn 2016 onwards)

Evidence from various strands of activity, including the H2OMG festival, suggests that it is more difficult to engage customers in discussions on some of the 10 outcomes than others. It seems to have been particularly challenging to engage customers on the outcome on Fair Profits, possibly because levels of customer understanding in this area are relatively low. That said, participants at three of the future customer workshops seemed to have been interested in this topic. At one of the workshops, of the six major challenges facing the company, market structures and financing of the industry generated the most questions from those who took part.

In the Acceptability research on the Strategic Direction Statement, **Fair Profits** was ranked 10th of the 10 outcomes in order of importance, however it was still seen as important by 67% of customers. (The most important outcome was seen as important by 97% of customers). Customers made a variety of suggestions about how to make the outcomes more acceptable, including achieving a better balance between profit, investment, costs, and customer satisfaction.

In the same research, customers were introduced to Anglian Water's six major challenges (climate change, population and economic growth, environmental protection, affordability and customer expectations, planning for the future, and markets, structure and financing of the industry). Customers felt the **least important was markets, structure and financing of the industry** (judged to be important by 52%). Twelve percent of customers felt some challenges should be excluded, with markets, structure and financing of the industry the most popular choice (45% of these customers opting to exclude it).

Findings from the customer world focus groups, online community and qualitative interviews for the segmentation research suggest some customers are concerned about **privatisation and foreign ownership of the company.** Some participants at the future customer workshops also felt it would be better if investors were UK-based. However, most customers do not appear to be very focused on these issues, or seem to be generally accepting of the role of the organisation in

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providing infrastructure and services. Participants at one of the future customer workshops suggested that people are generally comfortable with water companies, in contrast to the way they feel about gas and electricity companies, which are are seen to charge too much. They also felt that private investors were more likely to invest in keeping things working and making improvements than Government would.

These findings appear to be confirmed in the segmentation research, where aggregate results suggest that more customers think **private companies (47%)** rather than government (39%) should run water companies (14% of respondents said they didn't know). However, the research suggests some differences between customer segments on this question, with for example, "ecoeconomisers" and "protective provincials" more likely than average to think government should run water companies (49% and 44% respectively).

In the Community Perception Survey, customers were asked if they agreed with the following statement: "I believe it is important for businesses to balance the needs of themselves, their customers, the local community and the environment". This year, 83% of customers agreed (n=1404), reflecting similar results from years one and two of the survey. However, again the segmentation research revealed differences of opinion across the customer base on this question. For example, while just 32.9% of "tech savvies" felt strongly about this (answering 9 or 10, where 10 is strongly agree), 80.1% of "eco-economisers" felt the same. Quotes from customers who took part in the online community suggest that some customers do not support use of the phrase "a model of shared pain and gain" as a way of summing up this idea. This was viewed as jargon by some customers.

In the Community Perception Survey, customers were asked if they agreed with the statement: "If a company had a poor ethical and environmental policy, it would stop me from using them". This year, 37% agreed, 33% gave a neutral response, and 31% disagreed (n=1384). Figures closely reflected 2016/17's results (38% agreeing), which had been a significant increase over 2015/16 figures (33%). This year, the proportion of Hartlepool Water customers saying this was important to them increased.

In the same survey, customers were asked if they agreed with the statement: "Anglian Water is ethical and fair in the way it does business". This year, 50% agreed, with 45% neither agreeing or disagreeing, and 5% disagreeing (n=1095). Results for those agreeing in 2016/17 were 47%, and 2015/16 were 52%. This year, the proportion of Hartlepool Water customers who felt the company was ethical and fair in the way it does business increased.

As discussed elsewhere, in this year's Community Perceptions survey report, the research team plotted the different dimensions explored in the survey against their derived importance in terms of ODI score (customers' perception of whether Anglian Water cares about the communities it serves) and whether they are currently perceived as areas of high or low performance. This revealed **potential**

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	"hidden opportunities", or areas that are important in driving customers' ODI scores but where performance is currently regarded as lower. These included perceptions that the company is ethical and fair, as well as whether it treats customers as individuals, makes a significant contribution to the local economy, values me as a customer, and is considerate in the way it carries out work in the community.
All	Transparency, profits, debt and tax
	What we already know (as at June 2016)
	Across qualitative research and engagement activities customers want more assurance that current levels of profit are 'fair' and reasonable (given the need to invest in the infrastructure and tackle future challenges while keeping bills affordable). There was a fairly strong message from customers who took part in these activities that they want more transparent information about this. Stakeholders at the Joint Panel event also felt it was important for the company to do more to explain a number of relevant topics to customers, including: company targets, performance and profit; the need to balance the different expectations of customers and shareholders; and how customers may benefit from investment and strong performance. There was a strong message from respondents to the consultation about the need for customers to share in the benefits of good performance.
	Some young people who took part in the future customer workshops appeared to be less concerned about profit levels , emphasising that returns for shareholders need to be sufficient to sustain investor interest in the company (while keeping bills affordable). It is not very clear from the evidence what is shaping young people's views (or whether these are likely to change once young people become bill payers themselves).
	When company finances were explained to participants (at the deliberative and future customer events), some expressed concerns about levels of company debt.
	However, in the Acceptability research, over 90% of each of the customer groups found Anglian Water's proposed plan relating to 'Fair Profits and Smarter Ways of Working' acceptable , with the exception of Vulnerable Customers where the proportion dropped to 84%. Respondents in the 18-25 age category were significantly more likely to find the plans acceptable than were those in each of the older age groups. Of the 156 respondents who said that they found this element of the plan unacceptable, the main reasons given were: profit margins too high/above rate of inflation (21%); shareholders prioritised over customers (17%); too much money going to shareholders (12%); profits should be re-invested – not paid to employees/shareholders (10%); and water services should be taken back into public ownership (8%).
	What's emerging (Autumn 2016 onwards)
	In the online community trial, customers were clear that they wanted the company to share honest information about costs, investment and profits. Customers

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were reassured that the company is partnering to introduce efficiencies and reduce bills. However, they wanted more detail on why Anglian Water is **borrowing money** (and from whom), as they were largely unaware of this.

Quotes from those who took part in the online community trial suggest some customers want to know more about how how "fair profits" and "efficient funding" are judged.

Echoing findings from PR14, participants at one of the future customer workshops expressed the view that in order to secure investors it was necessary for the company to make a profit.

Respondents to the Willingness to Pay survey who mainly opted for the 'no change' options in the choice task were asked a follow up question about their reasons for this. Feedback suggests that most status quo choices were largely based on motivations related to satisfaction with current service levels or to affordability (57% for DCE and 46% for BWS household respondents, and 52% for non-household respondents). Protest-type responses (related to the cost of water bills, company performance and profits) drove a sizeable minority of status quo choices for both types of respondent (between 34%-41%). However, the study authors conclude that overall this relates to relatively small numbers of customers.

In the initial, "package", set of questions asked of respondents to the Water Resources study, among household customers the next most popular reason for rejecting the set of service improvements was the idea that water companies already make enough profit as it is (after concerns about affordability and higher bills). It was the top reason mentioned by non-household customers (closely followed by the idea that the water company should pay, and then by objections to paying higher water bills).

The analysis of social and digital media content for the period 1st February 2017-31st January 2018 found that the issue of **tax avoidance** featured strongly in conversations during this period. It was ranked first in terms of reach, featuring in 182 conversations with a potential reach of 572K people. This topic achieved the highest reach due to Twitter shares (largely by finance professionals) of a Financial Times piece that accounted for almost a quarter of content. However, the study authors comment that the unveiling of the Paradise Papers resulted in little social media reaction. Instead this was largely confined to comments sections on media sites. The Daily Mail's This is Money section produced the most widely read piece, with nearly 300 comments and 172 shares, and with many commentators **calling for water utilities to be nationalised**.

The acceptability research on the outline PR19 business plan found that **most customers found the plan acceptable**, and that acceptability increased on being informed (from 74% to 80% for household customers, and 78% to 85% for non-household customers). Quotes set out in the report for the acceptability research suggest that **factors driving acceptability** include: trust in Anglian Water; a perception that the company has identified the right issues to focus on; and a

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sense that Anglian Water is aiming for excellence or "setting the bar high". Quotes suggest that **drivers of unacceptability** include: costs; a perception that Anglian Water should have invested more and taken less as profit in the past; a concern that future bill increases will support profit not improvement; and a sense that the company is being very ambitious and may not have the resources to achieve it all.

In the online community activities on **corporate governance** (August 2018), participants were presented with a press release from Anglian Water, detailing recent changes to the company's structure and governance arrangements, designed to improve transparency and boost trust and confidence.

The activities found that the **commitments set out in the press release impressed participants**. They were interested to learn more about the internal workings of Anglian Water, and felt the press release was an important step in opening up communication routes between the company and customers. The company's efforts to **voluntarily share information** were received positively. The press release was also felt to be a **helpful reminder of the many dimensions involved in running a big business**, and the importance of juggling multiple needs and expectations. The **online community itself was seen as a key tool in boosting transparency**.

In terms of the specific measures outlined in the press release, customers were pleased to hear about the removal of the company's Cayman Islands holding company, in response to customer concerns. Going public about this issue was regarded as a "brave step" that will force the company to be accountable for what comes next. Hearing that shareholders will be taking less in dividends and investing more in resilience was also welcomed as a sign of social commitment and responsiveness to the region's needs. Together with changes to pensions, this measure reinforced the idea that Anglian Water is focused on the long-term success of the company rather than on short-term profits. The company's announcement about having more non-executive board members in future was also regarded as helpful in opening the company up to independent ideas and challenge.

Despite these generally very positive reactions, some customers were more sceptical about what had prompted the press release, and whether this was a response to external regulatory pressure rather than decision that the company had made itself. Though customers were relieved that the Cayman Islands holding company was being dismantled, they felt that true transparency called for more explanation about why it had existed in the first place, what motivated Anglian Water to dismantle it, and what possible benefits the company may lose from doing so. Though reduced dividends and increased investment by shareholders was welcomed, some participants questioned whether this may make Anglian Water less attractive to potential investors in future. Some were concerned that customers would eventually have to pay more in their bill as a consequence. While most participants equated more non-executives on the board with greater external scrutiny, others questioned whether this may impact on the expertise that Anglian Water has access to in running in the company.

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	Overall, the research found that although the press release was well received, the announcement itself wasn't sufficient to transform perceptions of transparency. As well as clear communication routes to keep investors and customers well informed, participants felt that this agenda required some SMART targets to give customers confidence that it is being taken appropriately seriously.
All	Regulation and competition
	What we already know (as at June 2016)
	Participants in qualitative research and engagement activities demonstrated patchy understanding of the regulatory environment and the specific roles of the different bodies involved. In general, business customers seemed somewhat better informed than householders.
	After an earlier increase, from 2012 to 2014 there was a steady drop in the proportion of household customer respondents to the Consumer Council for Water Annual Tracker survey who felt it was "absolutely essential" to have a consumer champion representing their interests for Hartlepool Water customers, although proportions have remained more steady among Anglian Water customers. (Some participants in qualitative research were concerned that having several organisations involved in regulation means issues may "fall between stalls"; others were reassured that important decisions about pricing, quality and investment were being examined by a range of different parties.)
	A few respondents to the consultation (mainly employees of Anglian Water) felt the company should do more to help customers to understand the regulatory environment in which the water and wastewater service is delivered.
	Half (51%) of account managed and a fifth (19%) of non account managed respondents to the Business Customer Satisfaction survey said they were aware of planned changes to the water industry involving the opening up of the English market to competition from 2017 . Both account managed and non-account managed respondents said their key consideration in choosing a supplier in future would be price; followed by "other" (largely the quality and reliability of the water supply); followed by customer service.
	Among stakeholders at the Joint Panel Event, there was some concern that opening up the market to competition from 2017 will allow businesses to "cherry pick" the cheapest supplier, leading to higher costs for remaining customers.
	What's emerging (Autumn 2016 onwards)
	In the segmentation research, aggregate results suggest a majority of household customers think they should be able to choose their water and sewerage company in future (74%). However, views on this question varied between groups, with "tech savvies" (28% of the customer base) the most likely to support choice (80%).
	In the online community trial, customers generally reacted positively to statements about Anglian Water "welcoming greater competition" in order for customers to

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	receive the best service possible. However, they were not aware of the areas of the business that would be affected by competition, or how markets in water would operate in practice.
	In one of the future customer workshops, participants expressed the view that domestic competition might be a good thing, but that most people would not be very concerned about this as water is not expensive and the service generally works well.
	The research that tested the acceptability of Anglian Water's performance commitments and outcome delivery incentives (ODIs), found that the Open Water situation was still news to many household and non-household customers, so the role of water retailers was not well-understood.
	The consultation on Anglian Water's draft PR19 plan with members of the online community found that discussion of the proposed performance commitment on retailer satisfaction led some participants to question why choice is not available to all kinds of customers.