

Ref 1.1

PR19: Customer Engagement Report

September 2018



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1. Introduction

1.1. Our customer engagement strategy

Welsh Water's vision is "to earn the trust of our customers, every day". As such, it is natural for us to want our business plans to be informed by the greatest degree of customer insight and customer involvement we can achieve, so we can really be sure that we are delivering against customers' priorities and that we strike the right balance between customer bills, service standards and investment in long-term resilience.

Following the launch of our new vision, in 2015 we introduced our 'customer-led success' approach in order to

- drive a customer-led culture across the company;
- give our customers a stronger voice in our decision-making; and
- to ensure that our long-term planning not only continues to meet the needs of our customers (both today and in the future), but also to encourage them to work with us to meet our common goals.

In this context, the Board decided early in the process (September 2016) that the business plan for PR19 should be driven fundamentally by the views of customers, elicited through an unprecedented programme of customer research and engagement. It should also be developed in the context of a long-term plan that looked forward a generation – Welsh Water 2050 – that should similarly reflect the views of customers.

Accordingly, our PR19 plan has been built on a strong foundation of ongoing customer involvement and has been influenced by views and input from its conception to completion.

Since 2016, approximately 40,000 customers (approximately 30,000 in specific PR19 related engagement) have given us their views on key aspects of our work, from how we should use any financial surplus generated each year to how we should tackle our long-term challenges; and from how best to communicate with customers in vulnerable circumstances to the overall acceptability and affordability of our business plan for 2020-25.

The Customer Challenge Group (CCG) has provided invaluable input, scrutiny, challenge and advice since its inception. The CCG's full report, is being submitted to Ofwat independently.



1.2. Structure of document

The rest of this document is structured as follows:

Section 2 – Background

- The development of our customer engagement strategy
- What we mean by customer engagement
- Principles of customer engagement

Section 3 – Ongoing customer engagement

- Ongoing tracking surveys
- “Have Your Say” on ‘customer dividends’
- Data analysis – sentiment dashboard
- Broader customer involvement campaigns

Section 4 – PR19 customer engagement programme

- Our approach to customer engagement
- The Customer Challenge Group
- Customer engagement framework for PR19
- Research methodologies and projects

Section 5 – Key PR19 projects and results

- Welsh Water 2050
- Phase 1 - Performance measures and customer priorities
- Performance Targets and Willingness to Pay
- Bills and overall affordability
- ODIs- Rewards and penalties
- Vulnerable customers
- Options testing
- Final acceptability testing

Section 6 – Knowing our customers – customer segmentation

- Customer segmentation from qualitative analysis
- Cluster analysis

Section 7 – Beyond PR19

Supporting Documents

2. Background

2.1. The development of our customer engagement strategy

In 2013, Welsh Water adopted a simple, clear vision for our business, “to earn the trust of customers every day”. Over 1,000 employees from across the business participated in workshops to develop the vision.

Our research has shown that there are two key drivers to building trust – increasing customers’ familiarity with who we are, what we do and how we do it; and the favourability of customer’s perceptions of Welsh Water. Favourability is driven by positive customer experiences of the service we provide and the perception that the services we provide offer good value for money.

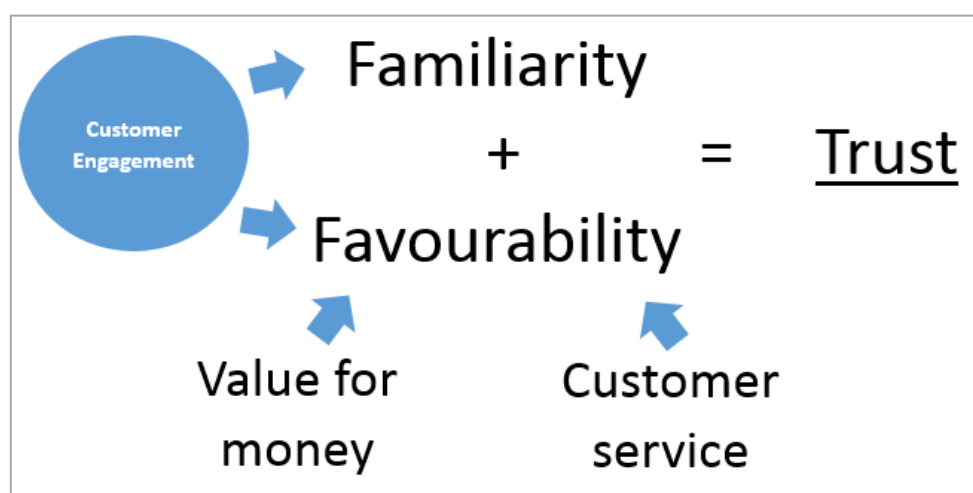


Figure 1 Familiarity and Favourability

This insight, together with our company vision, was the basis for our ‘Customer-Led Success’ approach that was launched in the autumn of 2015. The approach aims to bring customers into the heart of the company, actively finding new ways to engage with customers to give them greater input in our decision-making, to raise the visibility of our contribution to the communities we serve and environment we help protect, and to continuously improve our systems, process, policies and people for the benefit of our customers. Independent research has shown that trust in Welsh Water is now the highest (by some margin) of all water and sewerage companies (CCWater, Water Matters Report, July 2018).

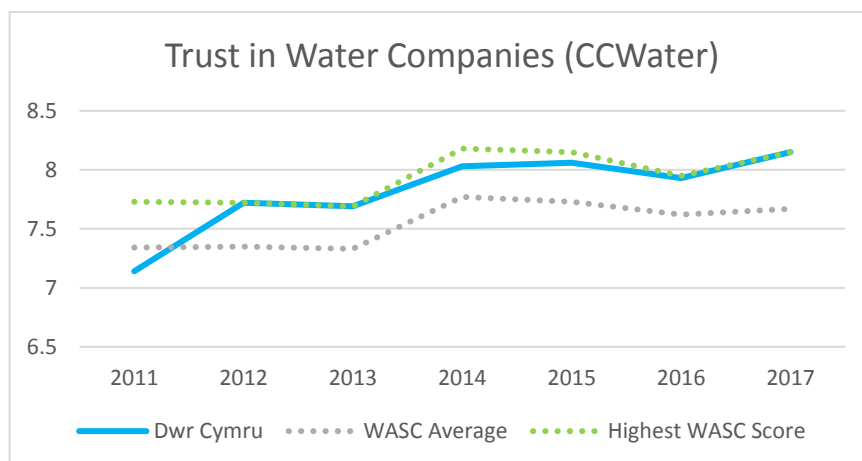


Figure 2 Trust in Water Companies. Source: CCWater

2.2. What we mean by customer engagement

For us, customer engagement is an ongoing process, and covers a range of different kinds of activities. Some of the different things that we do under the banner of customer engagement are as follows:

- 1. Commissioned statistically valid customer research conducted by independent customer research agencies:** This includes a wide range of methodologies (e.g. qualitative focus groups and online, telephone or face-to-face quantitative surveys). We also use the research commissioned by third parties (e.g. CCWater).
- 2. Insight derived from customer data:** Customer data can provide insight on customer priorities or operational areas that need additional focus. This includes all customer contact data, complaints, and customer feedback data (such as 'Rant and Rave' - which requests and collates customer feedback for each contact.)
- 3. Open public consultations:** This kind of consultation is appropriate when we want to engage large numbers of customers and ask them to provide their views on a key topic such as our long-term strategy (Welsh Water 2050), or how we invest financial surpluses. We normally promote these campaigns through a presence at festivals and major events across our operating area, via social media campaigns and innovative online channels (including a Facebook Messenger Chatbot), and through a series of stakeholder workshops and meetings. We can also link these campaigns to our Online Community (see below).
- 4. Behavioural change campaigns, education and ongoing community engagement to support day-to-day business activities:** We regularly implement engaging campaigns and community-related activities in order to:
 - raise awareness of the value of water to our lives, environment and economy;
 - encourage customer behaviour change to help meet business objectives such as reducing the number of sewer blockages, burst pipes in customers' properties during the winter, and deaths at our reservoirs; and
 - educating our current and future customer about water efficiency, how we work and where customers' money goes.

5. **Customer and stakeholder involvement:** We work with stakeholders, customers and communities to develop and deliver common objectives around, for example, catchment management solutions (e.g. WaterSource), or more resilient communities (e.g. Rhondda Fach Water Resilient Community Project – see section 3.7). We also work with customers and stakeholders to co-develop behavioural change campaigns such as ‘Let’s Stop the Block’.

2.3. Principles of Customer Engagement

Ofwat identified seven principles of good customer engagement in PR14. Seven additional principles have now been developed building on these original principles. The table below presents a brief overview of Welsh Water’s engagement activities which align to these principles. Further information about these examples can be found in the referenced sections of this document.

Our customer engagement activities have won numerous awards in recent years including Utility Week Customer Engagement of the Year 2016, Utility Week Marketing Initiative of the Year Award 2017, Water Industry Awards Customer Service Initiative of the Year 2017 (Customer Feedback App), and three Chartered Institute of Marketing Awards 2018 for Best Brand Builder, Not for Profit Innovation and Ad Campaign of the Year.

Principle of customer engagement as identified in PR14	Welsh Water engagement
Principle 1 – Water companies should deliver outcomes that customers and society value at a price they are willing to pay.	<p>Welsh Water has conducted significant research to ensure the Business Plan delivers outcomes that customers value at a price they’re willing to pay, including:</p> <ul style="list-style-type: none"> • Willingness to Pay research (section 5.4) • Performance Targets research (section 5.4) • Revealed preference research (section 4.4 Table 6) • Bills research (Section 5.5) • Options testing (Section 5.8) • Acceptability Testing (Section 5.9)
Principle 2 – Customer engagement is essential to achieve the right outcomes at the right time and at the right price.	<p>Since 2016, over 40,000 customer have been engaged in developing its Business Plan – 30,000 specifically on PR19-related activities.</p> <p>In addition, we have taken a three phased approach to the development of the plan (section 4.3):</p> <ul style="list-style-type: none"> • Customer attitudes and priorities • Key options and trade-offs • Acceptability of Plan
Principle 3 – Engagement should not simply take place at price reviews. Engagement means understanding what customers want and responding to that in plans and ongoing delivery.	<p>We have significantly increased our engagement activities in recent years, including our 2016 Have your Say consultation on how any financial surpluses should be returned to customers when 12,000 customers responded (section 3.3).</p> <p>In addition we have developed innovative monitoring tools such as our Customer Sentiment Dashboard (section 3.4) and a wide-ranging programme of customer and stakeholder involvement in projects as our RainScape programme,</p>



	<p>catchment management programme, and behavioural change campaigns (section 3.5 Table 2).</p> <p>We also have a significant number of ongoing research projects including:</p> <ul style="list-style-type: none"> • Trust tracker (section 3.2, table 1) • NHH Satisfaction survey (section 3.2, table 1) • Developer services survey(section 3.2, table 1) • Rant and Rave survey(section 3.2, table 1) • Customer feedback App(section 3.2, table 1) • Institute of Customer Service Service Mark accreditation(section 3.2, table 1)
Principle 4 - It is the companies' responsibility to engage with customers and to demonstrate that they have done it well.	We have aimed to evidence this throughout our Business Plan and this paper specifically. (Section 1.1 PR19 Customer Engagement Report)
Principle 5 - Customers and their representatives must be able to challenge the companies throughout the process. The engagement process should ensure this challenge happens. If this is not done effectively, we must be able to challenge on Customers' behalf. In doing so, we will fulfil our duty to protect customers.	We have had constructive engagement with our Customer Challenge Group and robust discussion with all key stakeholders.
Principle 6 - Engagement is not a 'one-size-fits-all' process, but should reflect the particular circumstances of each company and its various household and non-household customers.	We have striven to engage with customers using a mix of innovative and traditional methodologies, targeting specific customer segments and future customers. (Section 4.4 Table 5)
Principle 7 - The final decision on price limits is entrusted to Ofwat. We will use a risk-based approach to challenge company plans if this is necessary to protect customers' interests.	N/A
Additional principles outlined in PR19:	
Companies using a robust, balanced and proportionate evidence base to develop a genuine understanding of their customers' priorities, need, requirements and behaviours. For example, cross-checking and sense checking evidence on a range of techniques (such as stated and revealed preference willingness to pay techniques and	<p>We have used a wide range of engagement techniques and methodologies with over 30,000 customers involve in PR19 specific activities. (Section 4.4 Table 5)</p> <p>We have aimed to be innovative and ambitious in our approach including:</p> <ul style="list-style-type: none"> • Triangulation methodology used (section 5.3) which used multiple data sources (including complaints etc.) • Willingness to Pay research (section 5.4) • Performance Targets research (section 5.4)



experiments) and a range of sources (including information obtained through day-to-day interaction with customer, for example complaints).	
Involving customers in service delivery	<p>This papers evidences a number of areas where customers are increasingly involved in service delivery and improvement including:</p> <ul style="list-style-type: none"> • Watsource catchment programme (section 3.5 Table 2) • Rainscape (section 3.5 Table 2) • PestSmart (section 3.5 Table 2) • Customer engagement around capital projects (section 3.5 Table 2) • Water Resilient Water Communities (section 3.7) • Online community (section 4.1.1)
Engaging on longer term issues, including resilience	<p>Our Welsh Water 2050 consultation and looked at the significant challenges we will face in the future, resulting in the development of 18 Strategic Responses providing the foundation for our PR19 Business Plan. We also commissioned specific research on customers' views on resilience.</p> <ul style="list-style-type: none"> • Resilience research (section 4.4 Table 6) • Welsh Water 2050 Qualitative (2017 Summer Consultation) (section 5.2) • Welsh Water 2050 Quantitative (Have your say consultation) (section 5.2) • Welsh Water 2050 Qualitative Online Community Discussion (section 5.2)
Understanding the needs and requirements of different customers, including customers in circumstances that might make them vulnerable.	<p>We have worked closely with the CCG on the development of our Vulnerable Customer Strategy. In addition to our commissioned research, our Water Resilient Communities pilot project has given invaluable insight.</p> <ul style="list-style-type: none"> • Vulnerable customer research (section 5.7) • Social Tariffs research (section 4.4 Table 6) • Water Resilient Communities (section 3.7) • Segmentation of customer views (section 6)
Setting the context through the use of comparative information, with definitions that are consistent across the sector	<p>We have used comparative data in all our key research activities including:</p> <ul style="list-style-type: none"> • Willingness to Pay research (section 5.4) • Performance Targets research (section 5.4) • Acceptability Testing
Ensuring two way and transparent dialogue which includes educating and informing customers	<p>Our approach has always been to ensure that all customers can have a voice on our day-to-day and longer term business planning through open consultation and engagement activities. This is then complemented by robust and independent customer research.</p>

	<p>Examples of our encouragement of a two-way dialogue with customers are:</p> <ul style="list-style-type: none"> • Online community feedback (section 4.1.1) • Return of Value consultation (section 3.3) • Customer engagement around capital projects (section 3.5 Table 2) • Water Resilient Communities (Section 3.7)
Engaging customers as an ongoing process	<p>We firmly believe that engagement has to be ongoing to be effective and also to build trust with our customers. Examples of our approach include:</p> <ul style="list-style-type: none"> • Online community feedback (section 4.1.1) • Return of Value (section 3.3) • Customer sentiment dashboard (section 3.4) • Broader customer and stakeholder involvement such as behaviour campaigns and catchments programme (section 3.5 Table 2) <p>These are supported by ongoing customer research including:</p> <ul style="list-style-type: none"> • Trust tracker (section 3.2, table 1) • NHH Satisfaction survey (section 3.2, table 1) • Developer services survey (section 3.2, table 1) • Rant and Rave survey (section 3.2, table 1) • Customer feedback App (section 3.2, table 1) • Service Mark accreditation (section 3.2, table 1)

Table 1 Principles of customer engagement

3. Ongoing customer engagement

3.1. Introduction

Our Customer-Led Success approach has customer involvement at its core. Engaging with customers, listening to and responding to customers, and continually looking for new ways of involving customers, are essential to support the delivery of our objectives.

In this section we explain how we track customers' views on an ongoing basis, and describe other engagement activities undertaken in AMP6 unrelated to PR19, to demonstrate the ongoing nature of these activities.

3.2. Ongoing customer trackers

We regularly track customer views in a number of ways, either through our own commissioned research or via third party research, as summarised below.

Table 2 Ongoing customer trackers

Name of tracker	Commissioned by	Methodology	Purpose	Use
Trust Tracker	Welsh Water	CATI (telephone) interviewing. 125 customer HH and NHH surveyed monthly (total 1500 a year).	Understand levels of trust and brand perceptions of customers	Reviewed monthly by our executive team and reported in Annual Performance Report
NHH Satisfaction Survey	Welsh Water	CATI (telephone) interviewing. 2 waves of 500 customers (100 in total) each 6 months.	Satisfaction survey to maintain high level of performance to business customers	Reviewed monthly by our executive team and reported in Annual Performance Report
Developer Services survey	Welsh Water	Online or on the phone. 3 surveys completed yearly - 138 total responses in 2017	Understand how Developer Services interacts and engages with stakeholders and inform on areas for improvement in services and effectiveness of operations	Used internally to monitor progress and develop improvement strategies
Rant and Rave	Welsh Water	Telephone or text survey after an interaction with us	Gain customer satisfaction of the interaction and NPS score	Used internally to calculate NPS and gather other insights



Name of tracker	Commissioned by	Methodology	Purpose	Use
Customer Feedback App	Welsh Water	Survey completed on a mobile phone after a home visit.	Measure customers satisfaction for the job just completed	Used internally by team managers to monitor customer satisfaction
UKSCI	Institute of Customer Services	Online survey of consumers twice a year	National measure of customer satisfaction providing insight into the state of customer satisfaction in the UK	Used to benchmark Wels Water against other companies in the utility sector and wider
Service Mark Accreditation	Institute of Customer Services	Online survey for Customers and Employees	Accreditation	Ensure our workforce is continuing to be Customer led and create action plans to progress areas for improvement
Water Matters	CCWater	Telephone interviews with 400 customers per company annually (200 minimum with opportunity to add additional interviews)	Water Matters aims to identify household customers' views of water and sewerage services across England and Wales and monitors changes in these views over time.	Independent survey published to the public to benchmark welsh water against other WASCs
Testing the Water	CCWater	A total of 3,907 telephone interviews were achieved across England and Wales	Establish a benchmark for business customers' views on all aspects of water and sewerage services and to measure changes in business customers' views over time and since the last survey.	Independent survey published to the public to benchmark welsh water against other WASCs

Name of tracker	Commissioned by	Methodology	Purpose	Use
YouGov	Welsh Water	Quarterly tracker using YouGov Wales online panel. 14 waves completed to date with 1000 respondents in each wave (4000 total each year).	Track sentiment after major campaigns	Reviewed monthly by our executive team and reported in Annual Performance Report

The results of these regular surveys are discussed at Board level, and are watched closely for signs of where we may be going wrong in our service delivery to customers. Our aim is to respond rapidly and maintain high levels of customer satisfaction on an ongoing basis.

3.3. 'Have Your Say' 2016 – involving customers in 'customer distributions'

One of the ways in which we involve customers is in decisions around how we use the financial surpluses that arise from our 'not for shareholder' model. In 2016 we undertook a major customer engagement exercise to ask customers how these funds should be used in AMP6. This consisted of qualitative and quantitative surveys as well as an ambitious 10-week public consultation.

The public consultation allowed customers to choose an allocation of money against a number of different purposes such as extra funding for social tariffs, investing to improve the resilience of our water and wastewater networks, and upgrading recreational facilities. The consultation reached over 12,000 customers.

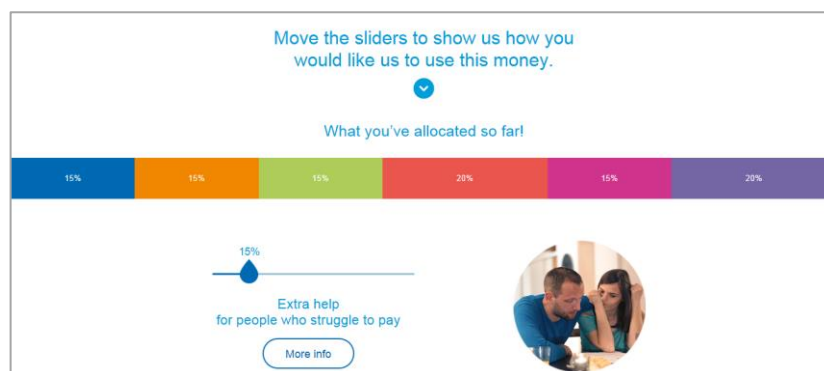


Figure 3 'Have your Say' consultation 2016

We also piloted some new engagement tools in a smaller qualitative survey, where customers could create video reactions to our survey, and piloted the use of 'hotspot' responses, a tool to help us identify consistent or varying views on the topics being discussed.

The results of the research informed the Board's decisions on how 'customer dividends' should be used in AMP6.

3.4. Customer Sentiment Dashboard

The Customer Sentiment Dashboard, developed using Tableau data visualisation software, provides a continuous quantitative evaluation of customer sentiment across our operating region. It allows us to identify geographical areas where there are likely to be issues and where we need to respond to what our customers are telling us on a 'real time' basis.

Each operational contact is given a score between zero (negative) and ten (positive) based on customer contact data and information from the Rant & Rave system. The information can be broken down by business unit and viewed at postcode area level.

The Dashboard provides a simple and user friendly interface to interact with the data. Currently the dashboard can be used-

- to obtain a quick overview of overall sentiment without needing a detailed analysis of customer contacts.
- to identify spikes in negative sentiment which could be an indication of a developing issue. By diving into the sentiment to find the cause, the business can quickly establish a plan for handling the rise in negativity.
- to estimate the impact of operational events or management strategies on customer sentiment, which in turn will lead to more effective decision making.

We are still developing the features of the Dashboard and future improvements will include:

- inclusion of social media contacts
- automated 'flagging' of emerging issues.

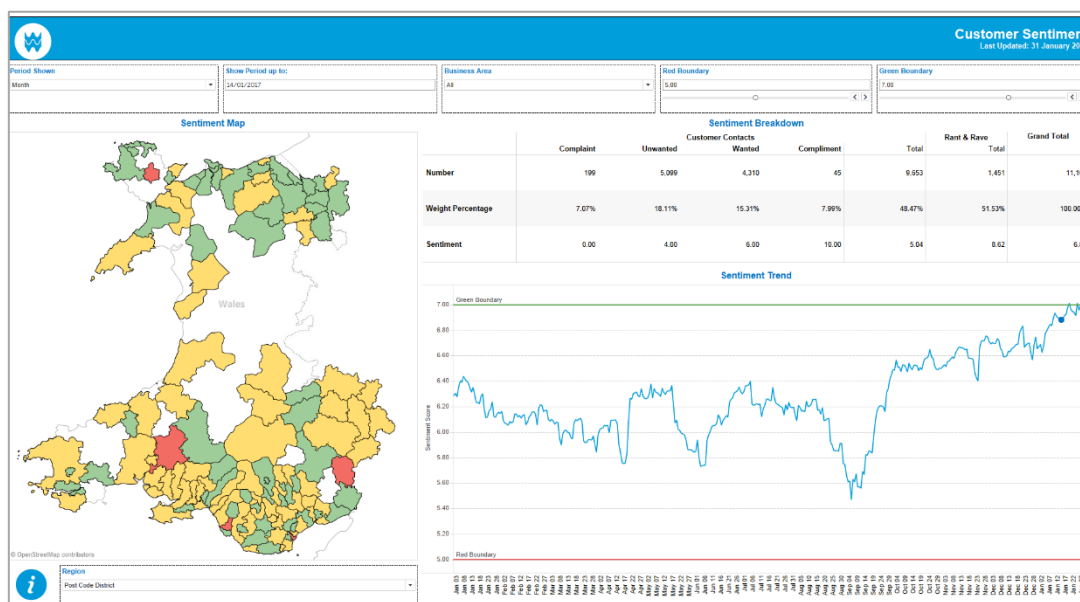


Figure 4 Customer Sentiment Dashboard



RESERVOIR VLOG #2



RESERVOIR VLOG #5



RESERVOIR VLOG #8

Innovation: Social Media 'vlogs'

In order to generate interest, educate customers and to encourage discussion and participation around some of the challenges we face, we commissioned a Welsh 'vlogger', Cai Morgan, to create a series of short films about nine key areas of the basis. These were shared on Social Media and used as discussion stimulus for our Online Community and some other research projects. The nine films were watched more than 250,000 times on social media, generating over 2100 comments, shares and likes.

3.5. Broader customer and stakeholder involvement

In addition to the activities described above, we engaged customers with regular campaigns aimed at behaviour change to support our business objectives. The following table summarises these activities and how they align with Ofwat's 'Tapped In'ⁱ report according to the report's four categories of action - Futures, Action, Community and Experience.

Table 3 Broader customer and stakeholder involvement

Customer involvement	Purpose	Approach	Tapped In category
'Let's Stop the Block' campaign	Behavioural change campaign to educate customers about what shouldn't be disposed of in the toilet.	Campaign targets geographical areas that suffer from a high rate of blockages; currently working with Corporate Culture (external consultancy) to review the campaign in order to increase customer engagement.	Action
'Wrap up Wales' campaign	Winter campaign to educate customers about the issues which can occur from exposed pipes.	Targets geographical areas with higher risk of burst due to frozen pipes, and promotes lagging of pipes. Also general awareness campaign. Works with	Action



Customer involvement	Purpose	Approach	Tapped In category
		organisations such as Age Cymru to target vulnerable groups	
Reservoir safety campaign	Behavioural campaign to highlight the dangers of swimming in our reservoirs	Multi award-winning campaign targets teenagers and those in their twenties. Extensive education and public communications programme. Works closely with schools and communities close to reservoirs, emergency services and local authorities.	Action
Tap campaign	New campaign to highlight the use of reusable bottles and refill stations.	Partnership with Welsh Government and Refill.	Futures
Rainscape	Innovative approach to reducing sewer flooding by reducing volume of surface water getting into the network. Our target for 2015-20 is to remove the equivalent run off from 25,000 rooftops.	Engagement with affected customers and communities is central to the approach. Partnerships with local schools, community and council.	Community
WaterSource catchments programme	WaterSource catchments programme involves a number of partnerships all aimed at improving the quality of our water at its source. These partnerships include the Brecon Beacons mega catchment, Pendine catchment project and Weedwiper partnership.	Co-development and co-delivery project with multiple partners including land managers, national park authorities, Natural Resources Wales and local communities.	Community
PestSmart	Promote the safe use storage and disposal of pesticides.	By encouraging customers use pesticides safely, they can contribute to protecting raw water sources, thereby saving on future treatment costs.	Community
Customer engagement around capital projects	Major customer engagement exercise to raise awareness (and customer understanding)	Multi-channel communications including customer drop-in sessions and online activity. Helps	Experience

Customer involvement	Purpose	Approach	Tapped In category
	of major capital delivery projects in local areas.	to maintain trust, reduce complaints, and avoid delays in implementing the projects, hence saving costs.	

3.6. Education programme

Our education programme sees more than 67,000 pupils engaged every year, either coming through the doors of our four Discovery Centres, or participating in an outreach sessions at their schools. The purpose of the programme is to raise awareness amongst children, and by extension their families and our wider customer base, of the value of water, where it comes from, what we do, and how they can help by reducing demand. The programme is linked to the national curriculum.

We also work with the Education Achievement Service for South East Wales (EAS) to produce a Teaching and Learning Pack to support teachers in the KS4 National/Foundation Global Citizenship Challenge. Our PR19 Business Plan includes a performance commitment to increase the numbers of children benefitting from educational programmes from 67,000 in 2020 to 75,000 per year by 2025.

3.7. Water Resilient Communities approach

Sitting alongside one of our largest investment programmes (£23 million), the Rhondda Fach Water Resilient Community Project aims to maximise the benefit of our presence in one of Wales' most deprived communities. It focussing key areas of our work on a small geographic area with the intention of leaving the legacy of a 'water resilient community'.

The Water Resilient Communities project is challenging us to work with and involve customers in a way that we have not done before, working with customers to co-create and co-deliver more resilient services.



Figure 5 Water Resilient Communities project map

The success of the project is dependent not only on the collaboration of departments and projects across our business, but also on the co-development of our strategy and its implementation with the customers, stakeholders and residents of the area.

The pilot project is running for twelve months (January-December 2018). It is our intention to roll-out this approach to one community per year throughout AMP7.

There are eight workstreams, each are working with the local community to improve the impact and implementation of its plans. These include: workshops to improve communication materials; engaging with customers on the identification of specific local operational issues that need addressing; working with local housing associations to support their residents with social tariffs; and supporting young people with work placements.

Key results to date include:

- Customers have saved over £60,000 by successfully applying for HelpU ensuring customers have more money to spend in their community or reducing their debt burden (a significant increase in take-up compared to other areas over the same period)
- Over 2,000 children have attended one of our outreach lessons on water efficiency, capital projects, or STEM
- Over 100 customers and stakeholders have contributed to over 50 workshops, meetings and focus groups
- Over £10,000 has been allocated to 28 community projects from our Community Fund
- Every school has been offered a Water Efficiency Audit on their premises to reduce water consumption and costs
- Pilots have started to provide free water efficiency audits and a 'tap and toilet' check in customers' properties to reduce water consumption and costs
- 6 young people have been given placements on the 'Get into construction' programme run by the Prince's Trust in conjunction with Welsh Water
- 19 applications have been received from the area to become a Welsh Water Apprentice

An innovative Facebook Live 'event' was held in the Pop Factory Porth to engage with customers online and explain the work we're doing in the area and what we're trying to achieve. Over 4,500 people have viewed the event.

A more complete description of the project can be found in Supporting Document 6.5 Water resilient communities: Rhondda Fach interim report.

Innovation: Facebook Live event in the Rhondda Fach



Customers had the opportunity to attend in person or watch on Facebook to get updates on the work in the area including the investment in the drinking water network and the additional work we are doing to build resilience in their community. Customers had the opportunity to ask questions via Facebook comments. 1,900 customers tuned in during the event and the video has since had over 4,500 views.

4. PR19 customer engagement programme

4.1. Our approach to customer engagement for PR19

The Board decided from the outset that our plans for 2020-25 should be founded on a solid evidence base covering the priorities, views and valuations of our customers. We therefore embarked much earlier than in previous price reviews on a comprehensive programme of research and engagement, developed jointly with the Customer Challenge Group (CCG – see below). Importantly we took on board feedback from the CCG about our approach to PR14. Rather than developing a plan and then asking customers for feedback, we took the results of the research as the starting point for business planning.

We sought to deliver an engagement programme that helps us understand the needs and expectations of our customers, by:

- developing a strong foundation of independent, statistically valid customer research as a basis for decision-making for PR19
- including public consultations open to all customers
- allowing for an open and continuous dialogue with customers
- using multiple data sources
- using new methodologies and innovative channels to engage with all groups of customers, especially businesses and those who are hard to reach and vulnerable
- providing a strong foundation for co-development and delivery of future initiatives in AMP7 in line with the ‘Tapped In’ report.

The scope and impact of our engagement has been substantial, with some 30,000 customers contributing their views. The step change in activity from PR14 has been recognised by our Customer Challenge Group.

4.1.1. Customer Involvement in numbers



Figure 6 Customer Involvement in numbers

Innovation: Online Community



Book

4 Comments

Add a comment



Dtrubbish

Thanks for the message it's lovely to hear our voices are being heard and taken on board in terms of Welsh Waters development not all organisations are as forward thinking and proactive so I am really glad to be part of giving feedback. Have a wonderful Christmas and New Year to the Welsh Water team!

55 days ago



Dove

It's great that you and your whole team are so passionate and committed to how Welsh Water is run for the benefit of your consumers. I personally enjoy being involved in the community discussions and finding out what plans for our future you have, keep up the good work!

55 days ago



Moggie

It's so good to receive your thanks - not everyone is as thoughtful! I am glad you feel that we are making a difference and that the input of this diverse group of people is appreciated - speaking for myself I have enjoyed it, especially the design of the new bills as it really did make me think so that you took.

55 days ago

Our online community, the 'Have Your Say panel' (www.dwrcymrupanel.com), was launched in July 2017 to give customers a platform to share their views, take part in research and receive information on how their feedback is being used within the business, creating a continuous feedback loop. At present the community has over 500 customers. The Have Your Say panel enables us to conduct a range of qualitative and quantitative research in an agile way, turning some pieces of research from brief to delivery within 24 hours, if needed. This allows us to quickly gain customer input on a range of day-to-day decisions, as well as closing-the-loop and letting customers know how their feedback is being used around the business which is key to building trust with our customers.

We have already undertaken 12 pieces of research and discussions on the online community.

4.2. The Customer Challenge Group

The CCG was established for PR14 and has continued into AMP6. A new Chair, Peter Davies, joined the CCG in February 2016, having previously been the Commissioner for Sustainable Futures in Wales.

The CCG has been critical to the success of this approach. Their role is to provide assurance that the research we have undertaken is of high quality, and that the results of that research are reflected appropriately in the company's plans. Our CCG also has an additional role concerning the way in which customers' views are best ascertained to inform ongoing business decisions such as how any financial surplus is reinvested or returned for customers' benefit in line with customer priorities.

Membership of the CCG includes the following individuals:

Table 4 CCG members list

CCG Member	Organisation
Craig Anderson	Warm Wales
Ruth Jenkins	Natural Resources Wales

CCG Member	Organisation
Geraint Weber	Natural Resources Wales
Lee Gonzales	Consumer Council for Water
Lia Moutselou	Consumer Council for Water
Bill Darbyshire	Environment Agency
Nigel Draper	MoneyLine UK
Jean-Francois Dulong	Wales Local Government Association
Duncan McCombie	Yes Energy
Steve Ormerod	Cardiff University & Independent Environment Advisory Panel Chair
Dimitrios Xenias	Independent expert research advisor
Delyth Jewell	Citizens Advice Bureau
Richard Williams/Carly Jones	Wales Environment Link
Rachel Lewis-Davies	NFU Cymru
Marc Lee (until 2017)	Legal and General
Mari Arthur	Cynnal Cymru
Matthew Williams	Federation of Small Business
Eifiona Williams	Welsh Government (observer)

The appointment of all members of the CCG has been carried out by the Chair. From September 2017 an independent secretariat was provided by Cynnal Cymru.

The CCG has met 17 times and has been attended by Welsh Water Board Members, including regular attendance by Chris Jones (Chief Executive), and three independent Non-Executive Directors as observers. Peter Davies, as CCG chair, has updated the Board at five Welsh Water Board meetings as well as contributing keynote presentations to two Welsh Water senior leadership conferences and one Innovation Conference.

Board members and CCG members have been able to view focus groups, either on location or via private internet livestreams.

A detailed timeline of discussions and input from the CCG can be found in the CCG PR19 report submitted independently.

4.3. Customer engagement framework for PR19

Our aim in PR19 was to create a plan influenced by customers' views from its inception to completion, as opposed to a plan that has been developed initially by the company, subsequently tested with customers and changed as a consequence of their feedback. We engaged PWC to help us develop a clear framework for all our PR19 customer engagement. The resulting three-phase approach (see below) was presented at the CCG meeting on the 27th March 2017 and agreed as a sound basis for structuring and presenting the customer engagement programme for PR19.

The objectives and outcomes of each phase are:

- **Phase 1: Attitudes and preferences.** The objective of this phase was to determine which areas of service customers see as priorities for performance commitments and to understand customers' views on important topics of interest.

- **Phase 2: Key Options and trade-offs.** The objective of this phase was to gather specific quantitative data on customer valuations and trade-offs, including willingness to pay of performance improvements. This informed the setting of performance targets, rewards and penalties, and investment trade-offs.
- **Phase 3: Plan acceptability:** The objective of this phase was to test the acceptability and affordability of our plan as a whole (including the service and investment proposals identified in Phase 2), in light of affordability constraints and our wider business plan.



Table 5 Three phase customer engagement plan

At a later stage, the Welsh Water Board decided to add a further step in the research programme, by carrying out an options testing exercise, whereby customers were able to choose between differing packages of bills and service standards. The results of this options testing (which can be found in section 5.8 of this document) were discussed with the CCG and then reflected in the final Business Plan, which was then subjected to acceptability research in Phase 3.

4.4. Research methodologies and projects

We contracted three external research companies as partners to enable us to draw on a range of skills and expertise. During PR14, we only engaged one research agency, and, together with the CCG, felt that having more than one agency would benefit the quality of our research output.

Questionnaires and materials for the research were developed with the independent guidance of the research company and, time permitting, circulated to CCG members for their comments and input.

The below table shows the research methods we used in our PR19 engagement programme. All respondents also have the opportunity to take part and complete the surveys in Welsh if requested.



Table 6 Research Methods

Methodology	Description
Qualitative Focus Groups (8-12 participants)	Exploratory research conducted in small groups between 8-12 people moderated by an independent researcher usually 3-4 hours long.
Large scale qualitative focus groups (50 participants)	Larger groups between 10-12 people moderated by an independent researcher 4 hours long.
Quantitative surveys – usually online	Survey which gives the ability to gather data. Can be conducted at any scale needed but usually no longer than 15 mins in length
Stated preference surveys	Telephone survey based technique for establishing valuations.
Revealed preference	Study of actual decisions people have made rather what they say in a survey. Survey based around River and Bathing waters and the choices of which site to visit, and how many visits to make.
Cognitive interviews	One to one interviews with customers to check if the survey and stimulus material is understandable and logical.
One to One in-home surveys	Surveys completed at a customer's home by an independent researcher with or without the aid of a support assistant. This is usually with customer in a vulnerable circumstances who may otherwise not be able to participate in the research.
Stakeholder interviews	Telephone or 1-2-1 interviews with representatives of a specific company/group of customers
Colleague interviews	Welsh Water colleagues completion of online survey
Youth Board	15 sixth form students from across south wales completing qualitative surveys as a group
Community Hubs	Research conducted in a community centre online using iPads with help from research field staff if needed. Conducted in more deprived areas to survey more customer who may be 'Hard to reach' due to low mobility, poor transport links or no internet access.

The projects undertaken as part of our PR19 engagement programme are listed below:

Table 7 PR19 research projects

Phase 1	
Topic	Purpose
Resilience	<ul style="list-style-type: none"> Understand how well customer understand the issue of resilience and their views on the extent to which resilience issues should be addressed in our PR19 plans
'Worst served' customers	<ul style="list-style-type: none"> Understand the needs and priorities of customers experiencing repeated service problems
Environment	<ul style="list-style-type: none"> Explore customer views towards various aspects of the Environment including some specific investment options
Water resources management plan: Willingness to pay	<ul style="list-style-type: none"> Assess attitudes towards water shortages and water restrictions and how these could be addressed and attitudes towards supply and demand side resilience options
Vulnerable customers*	<ul style="list-style-type: none"> Understand the needs of customers in vulnerable circumstances and benchmark Welsh Water against other service providers
Customer Priorities	<ul style="list-style-type: none"> To understand what customers feel about Welsh Water today, and to explore areas for improvement
Performance measures	<ul style="list-style-type: none"> Evaluate the current and potential performance measurement framework
Customer service expectations	<ul style="list-style-type: none"> Understand customers' expectations of service from retail world generally and in terms of specific elements: contact preferences; language preferences and services for vulnerable customers
Phase 1 Triangulation*	<ul style="list-style-type: none"> Understand which areas of service customers see as priorities for improvement using multiple sources of data.
Phase 2	
Topic	Purpose
Willingness to Pay (WTP)*	<ul style="list-style-type: none"> Identify, through the use of stated preference (SP) surveys or other appropriate methods, which areas of service were most important to our customers, and to estimate the value that customers place on different levels of service across our service measure framework
Willingness to Pay Company Comparison	<ul style="list-style-type: none"> Comparative anonymised review of stated preference (SP) willingness to pay (WTP) results for 13 water companies from England and Wales. The purpose of performing the comparison is to allow companies to see whether their own results are 'within the pack' or are outliers.



Welsh Water 2050 Qualitative (2017 Summer Consultation)*	<ul style="list-style-type: none"> • What existing expectations do customers have of us in planning for the future? • Do customers agree with the 14 Strategic Responses that we set out in its Water 2050 strategy? • How do customers prioritise the 14 Strategic Responses within Water 2050? • In principle, to what extent are customers willing to pay for the investment required to meet the Strategic Responses?
Welsh Water 2050 Quantitative (Have your say consultation)*	<ul style="list-style-type: none"> • Identify customers priorities towards our key Water2050 objectives to inform delivery in PR19
Welsh Water 2050 Qualitative Online Community Discussion	<ul style="list-style-type: none"> • 9 weeks discussion on 8 topic areas to supplement quantitative data from the Have your Say consultation.
Youth Board	<ul style="list-style-type: none"> • The Youth Board acted as a forum for future generations of Welsh Water customers to debate long-term company plans.
Bills*	<ul style="list-style-type: none"> • Gauge current unprompted perceptions of water bill (affordability, acceptability and value for money) • Measure how bill perceptions compare to other utilities, and how they change when customers are more informed • Assess what customers believe their water bill pays for - and to what extent this drives acceptability of their bill • Gauge expectations and preferences about what will happen to water bills over the next few years (2020-25) • Establish preferences of what should happen to water company investment and bills over the longer term • Measure acceptability of the principle of social tariffs and how much customers are willing to contribute
Performance Targets* - Qualitative and Quantitative	<ul style="list-style-type: none"> • Explore customer valuations across a range of measures within context of a) impact on bills of improved performance, b) historical performance levels achieved, c) comparisons with other companies' performance and d) allow for trading off of improvements across measures within a fixed bill profile
Revealed Preferences- Bathing waters	<ul style="list-style-type: none"> • Explore the potential impact of Bathing Water Quality and River Water Quality improvements on recreational use of beaches and rivers in the Welsh Water supply area and to produce estimates of the use value to beach and river users of changes in key characteristics of bathing and river water quality
ODIs*	<ul style="list-style-type: none"> • Gain a comprehensive understanding of customer views on ODIs, through exploring the main principles to discussing detail around specific measures in detail
Social tariffs	<ul style="list-style-type: none"> • Assess response to the principle of a Social Tariff • Understand support for Social Tariff • Assess awareness of existing Social Tariffs



	<ul style="list-style-type: none"> Assess willingness to contribute to cross subsidy
Phase 3	
Topic	Purpose
Business Plan options testing*	<ul style="list-style-type: none"> In the context of a base case and an enhanced package (at higher bill), assess customer preferences.
Acceptability testing*	<ul style="list-style-type: none"> Measure and understand the acceptability and affordability of Welsh Water's final draft business plan for 2020-25 for household and non-household customers

* indicates that final reports are provided in the appendices. Reports from all other projects are available on request.

5. Key projects and results

5.1. Introduction

This section outlines the key projects undertaken to inform and support the development of our business plan, explaining what we did, the results, and how we have taken account of those results in our business plan. Note that these are only a selection of a much wider set of research projects as noted above, the results of which were also used in the plan development.

- Welsh Water 2050 – customers’ views on the long term challenges we face and how we should prioritise them in the next period
- Customer priorities and performance measures (Phase 1 triangulation)
- Willingness to Pay and performance targets
- ODIs – rewards and penalties
- Business plan options testing
- Acceptability testing

The list of all research can be found in section 4.4 and our appendices.

5.2. Welsh Water 2050

During 2017, the Board developed its long-term vision for Welsh Water in 2050, “*to become a truly world class, resilient and sustainable water service for the benefit of future generations*”. This was the basis of developing a consultation document on which we wanted to invite extensive input from customers and stakeholders, both on the document itself, and on the priority areas for investment in AMP7. For more on Welsh Water 2050, see our Supporting Document 1.4 Welsh Water 2050.

We launched our Welsh Water 2050 consultation at a stakeholder workshop at the Principality Stadium on 2 May 2017. Our strategy to consult with a range of customers and stakeholders at different levels of knowledge of the issues, and tailor the type of research accordingly. For example, expert attendees at the stakeholder workshop discussed Welsh Water 2050 for an entire day, whereas our wider base of ‘uninformed’ customers who responded to our consultation may have only spent a few minutes answering basic questions on an iPad survey. This approach, which was developed with the CCG, is summarised below.

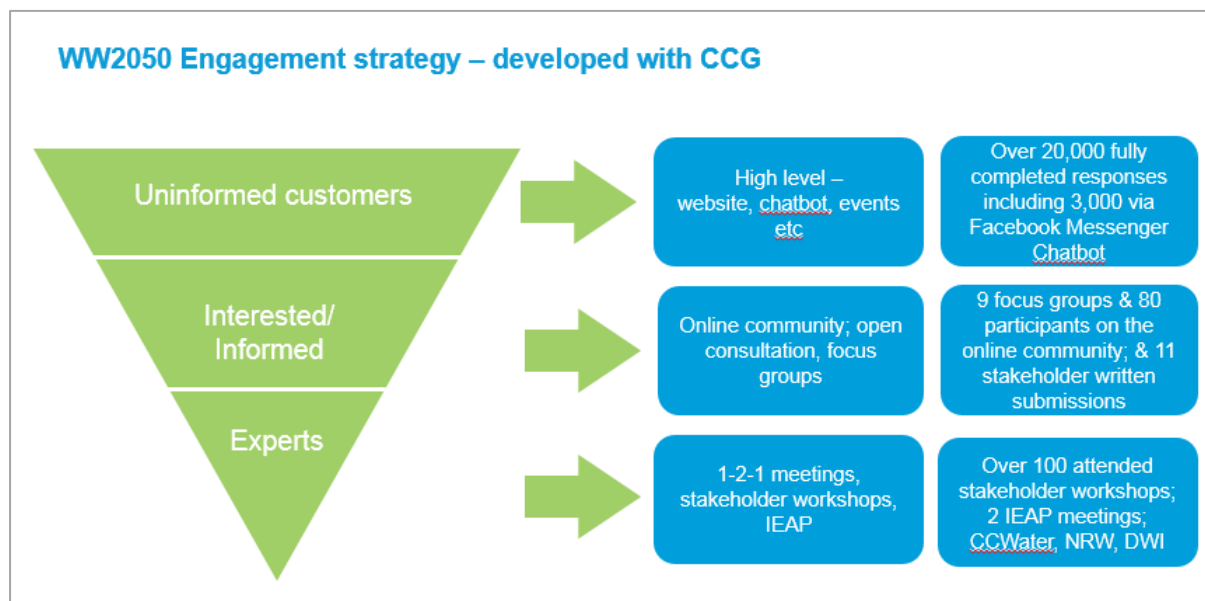


Figure 7 Water2050 consultation

At our stakeholder event we held a full day workshop in which we presented the plan to 100 stakeholders, who were then asked to prioritise the Strategic Responses and comment on gaps. One to one meetings were also held with key stakeholders.

We held nine in-depth focus groups and ran an eight-week consultation on our Online Community using a series of 'Reservoir Vlogs' to stimulate discussion.



Figure 8 'Have your Say' consultation 2017

Uninformed customers took part in the major open public consultation held over the summer of 2017. Details of this can be found in the Quantitative results below.

We asked about the relative importance of the Strategic Responses, what is missing from the document, and whether customers would prefer to pay more on their bill to enable us to do more earlier on meeting future challenges, or whether they would prefer to pay less and delay some investment to future periods.

Results: Qualitative research

Nine focus groups were held in five locations across Wales, with a total of 108 customers participating. In addition, five in-depth interviews were conducted with customers in vulnerable circumstances. Customers were asked for their views on the eight key challenges, and then invited to rate the 14 Strategic Responses in terms of importance.

Overall, customers felt that our Water2050 plans were addressing the most important future challenges we face and they expect us to be planning for the future and are happy to see it addressing challenges that are both in line with and beyond customer's experience and expectations. The process of learning about future plans has led to increased confidence in our business.

When discussing Investment versus bills, the majority of customers supported an increased bill of up to £20.

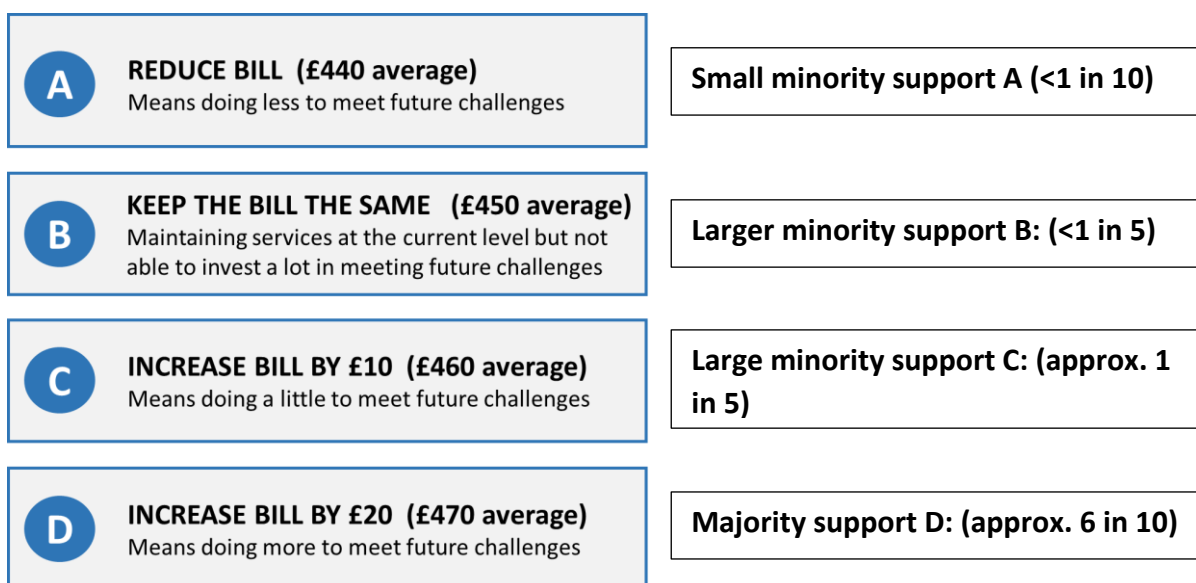


Figure 9 Investment vs Bills Water2050 Qualitative research



Innovation: Youth Board

We invited 15 young people (16-18 year olds) from schools across South Wales, aged 16-18, to form the Youth Board to advise the company on how to tackle significant issues facing the company in the future.

The Youth Board acted as a forum for future generations of Welsh Water customers to debate long-term company plans.

The students then worked over the summer of 2017 on improving our Let's Stop the Block campaign.

Results: Quantitative research: Open public consultation

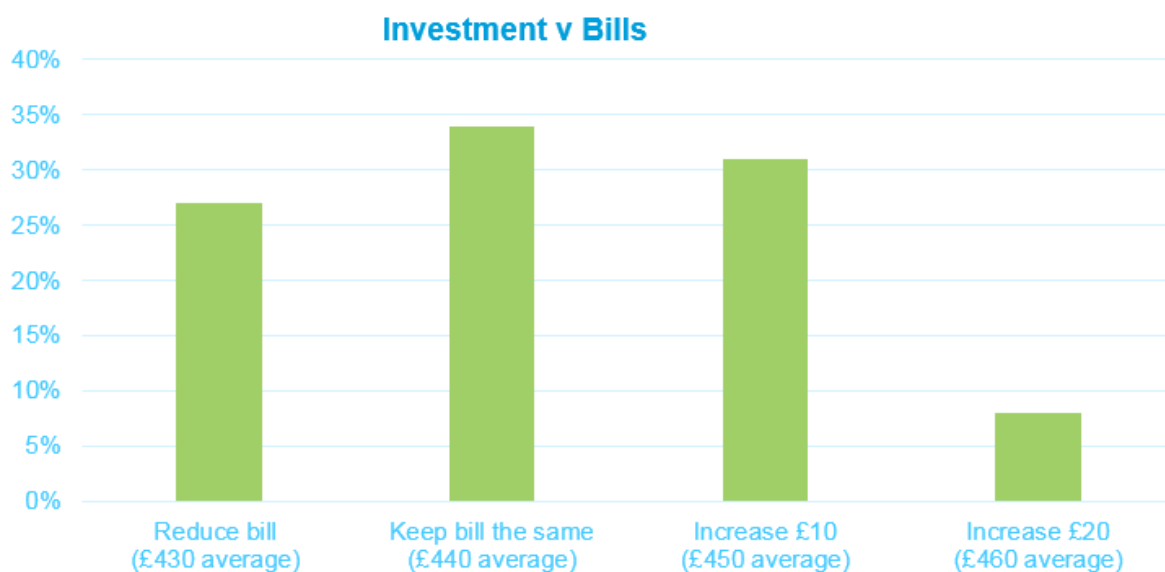
Customers were reached at various public events throughout Wales via a survey on tablets (58%), through the website (23%), via a Facebook 'Chatbot' (15%), and via paper questionnaires (4%). A total of 19,980 customers fully completed the survey. Customers were asked to rate eight of the Strategic Responses (chosen for their relevance to customers) for importance out of 5. The results can be seen in the table below which shows that all responses were considered to be important with scores out of 5 all ranging in a narrow band between 3.89 and 4.59.

	Mean score On a scale of 1 to 5
Cleaner rivers and beaches	4.59
Working with nature for cleaner water	4.51
Better water quality for all	4.50
Working with nature to reduce flooding and pollution risks	4.46
Making the water supply more reliable	4.33
Making things better for customers who are let down most often	4.24
Giving more back to our communities	4.21
Helping people who struggle to pay their bill	3.89

Table 8 Results of 'Have your Say' consultation 2017

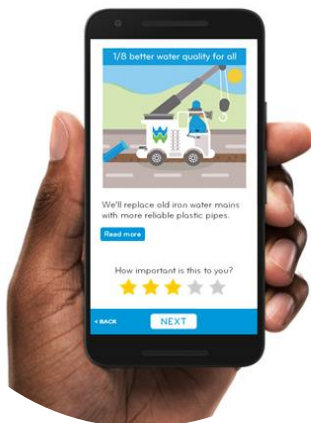
When discussing investment versus bills, 39% of customers voted for increasing bills (and doing more to prepare for future challenges). Around a third prefer to keep the status quo, while just over one in four selected the option of reducing bills - even if that means doing less to prepare for future challenges.

The results differ notably from the qualitative research, in which customers were more informed about the issues. It therefore appears that customers' support for 'investing for the long term' increases as they gain more information on the topic.

*Figure 10 Investment vs Bills Water2050 Qualitative research ('Have your Say' consultation 2017)*

For full results from this consultation see Supporting Documents 1.1D PR19 Customer Engagement: Welsh Water 2050 qualitative research and 1.1E PR19 Customer Engagement: Welsh Water 2050 quantitative research (Have Your Say consultation).

Innovation: Chatbot



During the summer of 2017, we launched a bilingual (English and Welsh) customer 'chatbot' on Facebook Messenger to gauge customers' views on a number of major challenges as identified in WelshWater2050 which formed part of our 'Have Your Say' consultation.

This is an industry first to enable us to engage with a much wider range of our customers. Using targeted ads on Facebook, customers followed a link to an automated 'chatbot' asked a series of questions on upgrading water and sewer networks, keeping bills affordable and how much customers would be willing to pay for such services.

We received 2,942 completed responses via the Chatbot. It attracted a far younger audience than our wider consultation with 52% of respondents being under 35 and a further 35% being under 45.

Triangulation of Welsh Water 2050 priorities

In order to determine a final prioritisation of the Strategic Responses, following all of the Welsh Water 2050 customer and stakeholder engagement, we used a structured approach to 'triangulating' the prioritisation results. We took the results from the focus groups, the public consultation, and the stakeholder workshop, and applied a weighting of between 1 and 3 according to our triangulation principles (see section 5.3). Some assumptions were required in order to account for the fact that not all of the methodologies presented all 14 Strategic Responses.

Priority	Strategic Response*
1	SR1: Safeguarding clean drinking water by working with nature
2	SR2: Enough water for all
3	SR18: Playing our part in combatting climate change
4	SR15: Using nature to reduce flood risk and pollution
5	SR16: Cleaner rivers and beaches
6	SR4: Protecting our critical water supply assets
7	SR17: Protecting our critical wastewater assets
8	SR3: Improving the reliability of drinking water supply systems
9	SR5: Achieving acceptable water quality for all customers
10	SR6: Towards a lead free Wales
11	SR12: Leading edge customer service
12	SR13: Smart water system management
13	SR10: Addressing our 'worst served' customers
14	SR11: Employer of choice

Figure 11 Results of Water2050 triangulation

* Note that some of the titles and the numbering of the Strategic Responses have changed since the consultation version of Welsh Water 2050 and the final version. The final version has 18 Strategic Responses in total.

Impact on Business Plan

Change to Strategic Responses: feedback from the consultation – especially from discussion at the CCG and from CCWater – identified that there were a number of areas that could either be made more prominent or were missing as Strategic Responses. As a result, four were added to the final Welsh Water 2050 document:

- Ensuring affordability of services delivered to customers
- Supporting customers in vulnerable circumstances
- Working with customers and communities
- Leading edge customer service

This has helped focus our decision-making in these areas for our PR19 plans.

Customers told us that they expect us to be planning for the long-term, and there was a high degree of support for additional investment to start addressing the long-term challenges, even if it means increasing bills by £10 or £20 a year. Given the affordability constraints and other factors, we are not in fact putting up bills. But we do think that it is consistent with customer views to 'make a start' in delivering the investments that we think will be necessary to improve resilience and address long-term challenges during AMP7, on a 'no regrets' basis. We will focus on where we have the technology and can deliver value for money, recognising that delivering the full plan will require game-changing innovations, and we have taken into account customers' priorities.

See supporting document Ref. 1.4 to read more about Welsh Water2050 and supporting document Ref. 5.2 for the performance commitments we have proposed.

5.3. Phase 1 - Performance measures and customer priorities (including triangulation)

Phase 1 of our customer engagement provided a foundation for developing an overall understanding for our customers' views and opinions on key subject areas. The primary purpose of Phase 1 was to inform our selection of Measures of Success (Performance commitments), as we believe it is important that we are measuring service in the areas that matter to customers.

In order to have a broad and accurate view of 'what matters to customers' we undertook a detailed 'triangulation' exercise, using our own primary research alongside numerous other sources – including third party research, customer service data, operational performance and comparative data from across the sector. The results of this triangulation gave us an overarching view of customers' priorities which formed the basis for our Measures of Success. In the absence of industry best practice or guidance (CCWater guidance was not published at the time point of development with PWC) we developed our triangulation methodology using the following principles:

Triangulation principles:

1. More weight should be placed on data/information which is **consistent with other sources** – e.g. where there is an established regulatory or industry consensus/view, less weight should be placed on 'outliers' (unless there strong evidence of local nuances)
2. Greatest weight should be placed on data/information that is **fit for purpose** (collected using a methodology which has been designed appropriately for the purpose)
3. More weight should be placed on data/information which is **more robust and reliable** (statistically significant, consistent/repeatable/stable, and intuitive / coherent). Data/information which is less reliable will still be considered, though only for context or as corroborating evidence.
4. More weight should be placed on **more recent data/information**, except where there is reason to suggest recent evidence is less reliable (or where a longer-time series is required).
5. When considering **comparative information**, greater weight should be placed on data/information from closer comparators (companies with similar demographics, issues/challenges, etc.)

Figure 12 Principles of Triangulation

The full phase 1 triangulation report is provided in Annex 1.1J PR19 Customer Engagement: Phase 1 triangulation report.

We started by listing all of the areas of service relevant to customers. These were drawn from multiple sources including a full list of AMP6 Performance Commitments being used across the industry. Overall, we assessed 94 potential areas of service, across 28 categories.

We then assessed the level (strength) of customer priorities across the areas of service, considering each information and data source separately. We used historical and

comparative performance data (assuming that an area where our service is relatively poor is likely to be an important area for customers), data from customer contacts, qualitative primary research asking customers directly about their service priorities, and relevant research from other agencies. The final assessment of customer priorities was derived by applying a score for each service element, and then applying a weighting, based on the triangulation principles, to create a 'triangulated' list of priorities.

Summary of results

The outcome from triangulation at a category-level is summarised in the table below, with red indicating a higher priority, and green indicating a lower priority. The table also compares the triangulated outcome with the results from the specific performance commitments qualitative research that we conducted. The arrows indicate where the specific customer research suggested a significantly higher or lower priority than the triangulation results. The lowest and highest priority issues identified in our PR19 customer research is broadly consistent with the wider evidence.

Category		Category		Category	
Affordability concerns	Red	Security of Supply	Yellow	Water resources and abstraction	Green
Supply interruptions	Red	Customer Satisfaction	Yellow	Sustainability/ innovation	Green
Water Quality	Red	Specific customer groups	Yellow	Sludge	Green
Sewer flooding/collapses	Red	Asset health - wastewater	Yellow	Waste disposal	Green
Leakage	Red	Environmental	Yellow	SEMD	Green
Water Pressure	Red	Customer awareness	Yellow	Biodiversity/SSSIs	Green
Metering	Red	Resilience	Yellow	Catchment Management	Green
Community/ partnerships	Red	Energy/ emissions	Yellow	Health & Safety	Green
Water consumption	Red	Supply restrictions	Yellow		
Pollution incidents	Red	Asset health - water	Yellow		

Table 9 Results of Phase 1 Triangulation

Impact on business plan

In selecting our Measures of Success (48 in total), we first developed a list based on the customer priorities above, and then reviewed this list against Ofwat's requirements (the 'common' performance commitments and the 'bespoke' commitments required). Our final list therefore covers all of the customer priorities (with any exceptions justified and discussed with the CCG), the Ofwat requirements, and any other measures required for resilience or for other business reasons. This process is described more fully in Supporting Document Ref. 5.2 PR19 Performance commitments.

5.4. Performance targets and Willingness to Pay

Method

In order to explore customer valuations we conducted two pieces of research. The first was a Willingness to Pay survey, and the second was a separate piece of quantitative and qualitative research asking customers about their perceptions of current service levels and service improvements - Performance Targets research.

We commissioned Accent and PJM Economics to conduct a programme of Willingness to Pay research to estimate customer valuations for a range of possible service level changes, and to derive values that could be used in cost benefit analysis (CBA) for setting performance target levels.

The objectives of the study were to identify, through the use of stated preference surveys or other appropriate methods, which areas of service were most important to customers, and to estimate the value that customers place on different levels of service.

Following PR14 a number of issues concerning the UKWIR (2011) Willingness to Pay methodology were raised in industry reviews and by the CCG. Echoing these concerns, Ofwat's Water 2020 consultation proposed that companies consider how stated preference Willingness to Pay evidence could be improved and explore what alternative and complementary tools are available to understand customers' needs and requirements.

One of the principal criticisms of the methodology used at PR14 was the need for participants to trade off small risk reductions that could not be valued with any accuracy by customers. Our research partners proposed a revised methodology that removed the need for this step. The design was constructed around two linked exercises: a 'MaxDiff' exercise and a 'Package' exercise. These required participants to trade off packages of service changes and bill changes. A full report on our willingness to pay study can be found in Supporting Document 1.1A PR19 Customer Engagement: Willingness to Pay.

To supplement the Willingness to Pay research we undertook qualitative and quantitative research asking customers more directly about their perceptions of current service levels and whether they would pay more on the bill to improve them. The questions were asked within the context of a) the impact on bills of improved performance, b) historical performance levels achieved, c) comparisons with other companies' performance and d) trading off of improvements across measures within a fixed bill profile.

The quantitative stage used for this Performance Targets research consisted of an online and telephone survey involving 1,013 household and 300 non-household customers. The survey was designed around a menu exercise as shown below:



Figure 13 Performance Targets quantitative research

The full reports from this research are provided as Supporting Documents 1.1B PR19 Customer Engagement: Performance targets qualitative research and 1.1F PR19 Customer Engagement: Performance Targets quantitative research.

The qualitative stage consisted of four large scale deliberative workshops lasting 4.5 hours with some 50 customers at each workshop. Each workshop had sub groups which broke out into smaller discussion sessions to look at each service area in more detail. Each group then fed back the summary of their discussion to the wider group so that all customers attending understood the full list of measures and were able to vote on the importance of each. These were highly engaged sessions with detailed discussions and customer-led debate.

Summary of results

Willingness to Pay

Our analysis of the package exercise data found that participants were not willing, on average, to accept any service deteriorations in exchange for bill reductions. In fact, in the context of a decreasing bill, in real terms, participants would be unwilling to accept any deterioration in service at all, and would rather see any amount of service improvement rather than no service improvement. Once the bill change is in the positive range, however, participants become cost sensitive. This finding mirrors the result found at PR14 for Welsh Water.

With respect to improvement packages, we found that dual-service households (i.e. both water and wastewater) were willing to pay up to a total of £50.37 extra per year, on average, for an intermediate package of service improvements. This represents a substantial increase over the findings from PR14 where the corresponding figure was £16.05. We found strong evidence of diminishing marginal willingness to pay, with the

same customers willing to pay only an additional £19.21 for the stretch improvement package on average.

Performance Targets Research

The quantitative (survey) results showed that, for every measure, the majority of customers (both households and non-households) chose to stick with the base service option, with no change to their bill, rather than pay for performance improvements.

In the qualitative research, where customers spent a great deal of time understanding service issues and examining comparative and historical information, customers gave greater support to performance improvements.



Figure 14 Performance Targets qualitative focus group

Impact on Business Plan

In line with the views summarised above, we are proposing a package of performance targets which does not include any deterioration on current performance. The performance improvements are focused on those areas considered a higher priority by customers. The method for determining performance commitment levels includes cost-benefit analysis, which takes the valuations from the Willingness to Pay research and the Performance Targets research above to produce a range which is compared with the cost of delivering improvements. Overall, the performance targets we are proposing are derived, where relevant, from customer valuations.

The methodology for determining the performance commitment levels is described in more detail in Supporting Document Ref. 5.2 Performance Commitments.

5.5. Bills and overall affordability

One of the key trade-offs for the PR19 Business Plan is between the level of expenditure in the plan – to pay for performance improvements today and resilience for the future – and the level of customer bills.

In striking this balance we should be guided by what we have heard from customers about their circumstances and outlook, their opinion of the affordability and acceptability of the current bill, and the balance between keeping bills low and investing to prepare for the future and improve performance.

We have asked customers for their views on these questions in a number of the research projects undertaken over the last two years. For example, in Phase 1 the Customer Priorities research asked customers about their general circumstances and priorities, and the Welsh Water 2050 consultation asked customers to decide between paying more and allowing us to do more to prepare for the future, or vice versa. In Phase 2 we conducted a focused piece of research on bills and affordability. We have taken account of the results of all relevant research when determining our affordability strategy for PR19.

Method

Specific evidence relevant to bill levels and affordability was drawn from the following research projects:

- Bills research
- Return of Value 2016 consultation
- Welsh Water 2050 consultation
- 'Worst served' customers
- Customer Service Expectations

We also used information from CCWater's Testing the Waters research report.

Summary of results

- Though Welsh Water's bill is above the industry average customers are not generally aware why this is the case.
- Customers have seen incomes rise slowly if at all over the last few years, and the economic outlook remain uncertain. Customers are concerned about the future, and in particular whether their incomes will keep up with inflation.
- Most customers find the current bill acceptable, but a large minority (42%) say that paying their water bill is 'a stretch' (including 5% who say it is not affordable).
- Most business customers are satisfied with the value for money of their water bills.
- When asked about the trade-off between low bills today, and investing more for the future, the majority of customers who have been informed (briefly) about future challenges support increasing bills. For uninformed customers (i.e. before seeing any information about future challenges), there is a roughly even split between levels of support for increasing bills to do more to prepare for the future, keeping bills the same, and reducing bills hence doing less.
- Most customers support Social Tariffs in principle. The principle of a social tariff is understood and accepted by most customers and the majority of participants found the idea of a reduced price tariff acceptable.

Overall, while value for money remains a priority, the consistent message from our research is that delivering a bill reduction is not an overriding priority for most customers.

Impact on Business Plan

As noted above, our conclusion from the research we have done on bills and affordability is that our customers do not wish to see cuts in needed investment in order to push bills down. At the same time, customers expect us to make value for money a priority, and to push ourselves on efficiency as hard as hard as possible.

Our proposal is to cut bills by around 5%, or around £21 on the average household bill, in 2020 as we enter the next five years, and to keep bills flat in real terms (before CPIH inflation) thereafter. This is made possible initially by the reduction in the allowed 'return on capital' (essentially reflecting cheaper financing costs), and subsequently by very challenging internal cost saving targets. The level of bills is also affected by how we share out the costs of investment over time (our Pay As You Go ratio and the RCV run-off rate, which are set at their 'natural' levels), and other regulatory 'true ups' from the previous period.

We think that customer feedback supports this bill reduction representing good value for customers. 92% of customers say that the overall Business Plan is acceptable and 95% say that the proposed bill reduction means bills will be 'affordable', with strong support across all customer groups, including business and other non-household customers and those at high risk of being in vulnerable circumstances.

Our approach to bills and affordability in AMP7 is described in Supporting Document Ref. 3.1 PR19 Affordability Strategy.

5.6. ODIs - Rewards and penalties

Ofwat's Final Methodology for PR19 included guidelines around the setting of Outcome Delivery Incentives (ODIs) including financial rewards and penalties for outperformance or underperformance against performance commitments. The proposed ODIs scheme is expected to have support from customers, and in particular any deviations from the default guidance is expected to be justified in terms of customer research.

Against this context, we decided to do a piece of qualitative research with customers, first exploring attitudes to ODIs in principle, and then asking about the design of the ODIs scheme.

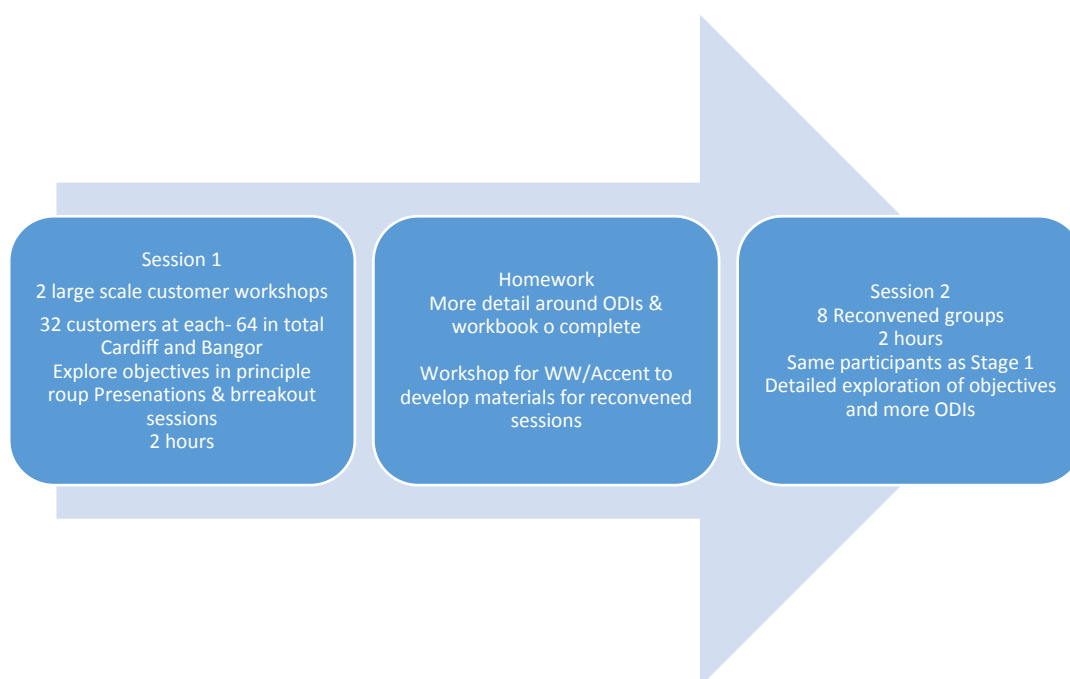
We were aware that ODIs would be a challenging topic for customer engagement as it is quite technical, and requires a certain foundation of awareness concerning business planning, performance targets and reporting. We also suspected that it would be particularly difficult for customers to conceptualise in the context of our not-for-shareholder model, in which all financial surpluses are returned to customers. As a result, we took a measured approach in which we would lead customers through the stages step by step, over the course of two focus groups, 6 weeks apart.

Method

The fieldwork was carried out in November 2017 (session 1) and January 2018 (session 2).

In total, sixty four household and non-household customers attended two two-hour sessions in Cardiff and Bangor. Groups were recruited using life-stage and social grade segmentations, and also included a mix of water and non-water dependent non-household organizations. The stages of the research are summarised below.

Figure 15 ODI research method summary



The first session introduced customers to the background necessary to understand ODIs, and took a few performance commitments as examples. The homework asked customers to consider a longer list of performance commitments, say if they felt they were suitable for rewards and/or penalties, and rate them as high/medium/low in importance. Session 2 then talked about a number of other, more complex measures, and discussed with customers whether they were suitable for ODIs, including resilience measures and things such as customer trust. To a limited extent we were able to ask customers about their views concerning in-period or end of period ODIs, and rewards and penalty 'deadbands'.

Summary of results

The main points from the research are summarised below:

- Customers understand the principle of incentivising companies by increasing profits for improved performance.
- However they struggle to see how this applies meaningfully to a not-for-profit company.
- Customers are emphatic that companies should not be 'rewarded for doing the day job'.
- Customers tend to favour in-period ODIs over end of period ODIs but there were mixed views, and customers accept that end-of-period ODIs are more suitable for some measures.
- On deadbands, customers generally thought it was appropriate for rewards and penalties to 'kick in' immediately, i.e. with no deadbands.
- Customers generally preferred variable rewards and penalties, i.e. with a fixed rate applied to variances from the performance commitment level, over having fixed 'fines' or 'bonuses', but with caps to avoid large bill variations.
- Customers wanted to minimise bill variations from rewards and penalties.

Impact on Business Plan

The design of our ODI proposals, and the link with the customer research, is set out in Supporting Document 5.5 PR19 Outcome delivery incentives.

Having considered the results of the initial customer research, our Board agreed the following approach to ODIs:

- Include a broad range of both rewards and penalties in line with Ofwat's guidance, where applicable to our Measures of Success.
- Ensure a stretching set of performance targets against all measures, to ensure financial rewards could not be 'easily' earned.
- Weight the individual rewards and penalties in line with customer priorities on performance for each measure, and consistent with customers' 'Willingness to Pay' for performance improvements where relevant.
- Assess the overall total package of rewards and penalties in terms of Ofwat's stipulated range and the views expressed by customers.
- Minimise the use of deadbands except where clearly justified.

5.7. Vulnerable customers

We undertook a specific piece of research to better understand our customers in vulnerable circumstances and what their needs are. We also ensured that we made provision in the design of research generally to ensure that the voices of vulnerable customers are heard.

Methods

This research was qualitative and consisted of 20 in-home paired interviews and four hour-long community group discussions. We also spoke to four stakeholders who represent or support customers in vulnerable circumstances in 45-60 min telephone interviews.

Our draft vulnerable customer strategy was also shared with the CCG for comment. We received a number of comments on the strategy which were taken on board when preparing the final version. The CCG will also be involved in the launch of our strategy for customers in vulnerable circumstances in autumn 2018 and in the ongoing delivery.

Summary of results

- Our current handling of customers in vulnerable circumstances is good. Third party stakeholders are supportive of our approach to vulnerability
- However, many vulnerable customers are eligible for help but are not currently getting it.
- Research suggests that we are missing opportunities to register customers known to be vulnerable despite CCWater research showing that we have the highest awareness of priority services registers of all the water and sewerage companies.
- 6% of those customers who say they cannot afford their bill say it's because of a disability. Customers with a chronic illness are more likely to say bills are unaffordable or a stretch.

Impact on Business Plan

Based on our research there is clearly an opportunity to increase awareness both of our Priority Services Register and our social tariffs. Because there are barriers to customers in need coming to us, it will be necessary to develop innovative new ways to proactively target those who may be in need. Research also demonstrated that community hubs are useful as a way of reaching customers in vulnerable circumstances.

Our strategy for AMP7 builds on our detailed research, together with the feedback from key stakeholders such as the Customer Challenge Group and Consumer Council for Water and learning from within our business. There are five elements to this strategy:

- *Data*: leading the efforts with other utilities, government and government agencies to identify customers likely to need our help. In particular we have made a commitment with Western Power Distribution and Wales and West Utilities to work more closely to share information on indicators of vulnerability and Priority Services Registers. We will expand this to include local government, government agencies and the third sector over the course of AMP7.

- *Priority services*: improving the support that we provide, based on feedback from customers, and extending the reach of our support by increasing the number of customers on our Priority Services Register.
- *Financial vulnerability*: making sure that we support, on a targeted basis, low-income households with our financial assistance schemes and money saving advice, as well supporting people to move out of poverty by providing employment and learning opportunities.
- *Partnerships*: building on our network of over 180 partners to raise awareness of our services and to ensure that our services meet the needs of vulnerable customers.
- *Training*: developing our teams and our supply chain to recognise the signs of vulnerability and provide them with the knowledge and skills to ensure that these customers receive the support that they need.

For more information on our vulnerable customer strategy see Supporting Document Ref. 3.2 Vulnerable customer strategy.

5.8. Options testing

In phase three of the research, when the plan was close to being finalised, the Board decided that we should put two alternatives for the final service-bill package to customers to explore their views. The optional 'extras' were elements that were not included in the 'base plan' but that the Board considered could be of benefit to customers – but at a cost in terms of bill levels.

Method

A mix of qualitative (focus groups) and quantitative (survey) methods was employed.

12 focus groups were held and four in-depth interviews were conducted in five different locations with a total of 85 customers engaged.

The focus groups presented basic information on our plans in the following areas:

- Water supply
- Wastewater and sewerage
- Customer service
- Resilience
- Environment

The information highlighted what we are planning to do to maintain services, and where customers could expect service improvements as part of a 'base plan'. It then explained the proposed change to the average bill from 2020 to 2025. The researchers then introduced the package of 'optional extras' and asked customers whether they would be prepared to pay roughly £10 extra per year as an increment on their bill in order to allow us to deliver these 'extras'. Customers were also asked for their views on each individual element of the extras package.

The quantitative research comprised a representative sample of 600 Welsh Water customers, completing a 12-minute online survey. The surveys led respondents through a series of information slides about different elements of the PR19 business plan, as per the focus groups, asking customers whether we should do more or less in each area. They were then presented with the associated bill level for the base plan and were asked for their overall impressions of the plan.

SUMMARY PLAN FOR 2020-25






	↔ MAINTAIN	↑ IMPROVE
 WATER SUPPLY	<ul style="list-style-type: none"> Reliable, safe and healthy water Meet water quality regulations 	<ul style="list-style-type: none"> ✓ Reduced interruptions to supply and leakage ✓ Improved smell / taste ✓ New lead pipe replacement scheme ✓ Fix ongoing water supply problems
 WASTE WATER AND SEWAGE	<ul style="list-style-type: none"> Safely treating waste water Disposing of by-products Using them for energy generation where possible 	<ul style="list-style-type: none"> ✓ Fewer incidents of sewers flooding inside and outside properties
 CUSTOMER SERVICE	<ul style="list-style-type: none"> Keeping customer satisfaction above the industry average 	<ul style="list-style-type: none"> ✓ Helping more customers who struggle to pay ✓ Improving service to vulnerable customers ✓ Increased education
 FUTURE PROOFING (RESILIENCE)	<ul style="list-style-type: none"> Long term reliability of water supply and wastewater service 	<ul style="list-style-type: none"> ✓ Improved security of computer systems ✓ Improving resilience of network
 ENVIRONMENT	<ul style="list-style-type: none"> Meet all legal requirements 	<ul style="list-style-type: none"> ✓ Improving water quality in rivers and at coasts ✓ Reducing pollution from untreated sewage

Figure 16 Options testing research showcard: base plan

Having discussed the 'base plan', the survey asked them to choose between the plan with and without the package of optional extras, with the extras adding £10 on the average bill. Customers were also asked for their views on each individual element of the extras package.

Optional Extras	Detail
A new appointment tracking service	A new system to book appointment 'slots'
Extra measures to ensure reliable water supply in extreme weather	Additional investments to keep water flowing to 100,000 customers in extreme weather
More of customers' lead pipes replaced	A larger programme of replacing lead pipes: 7,000 replaced instead of 3,500
Extra protection from flooding caused by overflowing sewers in heavy rainfall	Extra measures to protect an additional 20,000 customers at risk from this
Helping households with serious ongoing problems with wastewater and sewage service	Around 400 households have serious ongoing issues with wastewater service like persistent sewage odour that are costly to fix. Welsh Water would permanently fix these issues for 100 homes

Figure 17 Options testing research showcard: Optional Extras

Summary of results*Qualitative results*

Customers generally rated the company highly for service and value for money. In terms of the base plan, customers in general had a high level of satisfaction with the business plan proposals. Some vulnerable customers had a less positive view, driven by selective

experiences of poor service and a perception that some elements of the plan would not benefit everyone (such as lead pipe replacement).

The key points were:

- A high level of satisfaction with the 'no options' package (80%).
- Almost three quarters of the sample opted for the increased bill including the package of options.
- This results was largely driven by the perception that £10 per year was a small amount to pay to benefit more customers and drive efficiency in the future.

Quantitative results

60-65% of customers felt that we were doing the right amount in each of the five areas of the business plan. Around 30% felt that we should be doing more, whereas only 2-5% felt we should be doing less in each area.

61% of customers had an overall positive impression of the business plan proposals as presented (rating it 7 out of 10 or higher).

On the options, 51% of customers chose the package of service and bills with the optional extras, compared to 25% who chose the plan without options. 24% said they had no preference or 'don't know'.

Further results:

- For those choosing the 'enhanced' plan, the bill increase was perceived to be small compared to the improvements gained. £10 was seen as a small increase over a year.
- For those preferring the 'base' plan, the options lacked personal appeal or relevance.
- As would be expected a higher proportion of higher income customers (57%) than lower income customers (45%) chose the 'enhanced plan'. Of those who said that they couldn't currently afford their bill, 54% said they would prefer the 'base' plan.

Implications

Having considered the results in the round, the Board's view was that 51% did not represent a decisive majority for the options package as a whole, so it determined that the full package of options should not be included in the plan. The CCG also considered the results in detail and came to the same conclusion.

However, only around a quarter of customers rejected the plan outright. Customers who supported the options in the focus groups said that £10 was a small price to pay for benefits that would help thousands of customers. 59% of all customers agreed with the statement "the options include some interesting new ideas".

In order to respond to this, the Board decided that the most beneficial elements of the options package should be included in the plan, but that the final bill reduction for customers should be no less than what was set out in the research materials (i.e. a £20 reduction). The CCG endorsed this approach.

The three elements added were:

- Appointments tracking system
- Additional water network resilience
- Additional lead pipe replacement

Customers felt that the appointments tracking system should be included as 'business as usual' as it is becoming standard practice in other sectors. Additional lead pipe replacement is something that we know has strong stakeholder support (especially DWI), and helps us move faster towards a key Welsh Government objective. Strengthening the resilience of the water network is a high priority and the need was subsequently highlighted by Storm Emma.

5.9. Final acceptability testing

This looked at the acceptability and affordability for customers of our final plan and associated bill levels.

The headline results of the research show that 80% of 'uninformed customers' and 92% of 'informed customers' consider the business plan to be acceptable. There is strong support across all customer groups (including non-household and hard-to-reach groups) and 95% of customers consider the plan to be affordable (including those who consider it to be a stretch).

Method

After the completion of the 'options testing' research and the agreement of the main facets of the business plan discussed with Board in May, the research stimulus and survey were developed, taking into consideration CCWater's guidelines on Acceptability Research methodology.

We surveyed a total of 989 customers (809 household and 180 non-household customers).

Customers were initially given minimal information on the plan (only a summary of what we do as a water and sewerage company, and the proposed average household bill for AMP7). This provided an 'uninformed customer' view of the acceptability of the business plan. Customers were then provided with more details about our plan (presented around our six customer promises) and then they were asked again how acceptable they found the plan. This provided an 'informed customer' view.

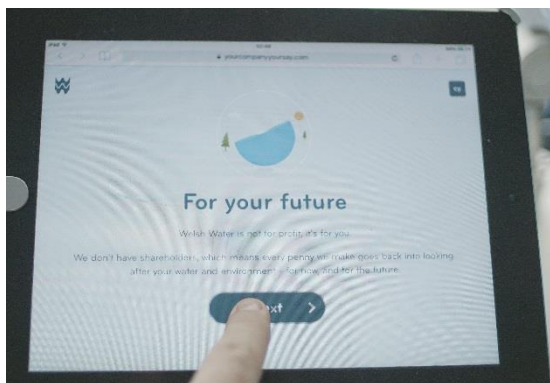
The research samples consisted of three main groups:

- 600 household customers surveyed online (representative sample of our customer base)
- 209 'seldom heard' household customers (surveyed in person by Blue Marble in Community Hubs)
- 180 non-household customers surveyed online.

Prior to the launch of the main quantitative surveys, six 'depth interviews' were conducted to validate the survey design. The qualitative stage then consisted of 12 focus groups consisting of 86 customers in total, and 16 depth interviews with 'worst served' customers, large non-household customers and stakeholders representing 'hard to reach' customer groups. The focus groups allowed us to gain insight into the drivers of customers' views on the acceptability of the plan that would not be possible through the quantitative survey.

They also allowed us to test if stimulus and materials were sufficiently clear for use in the quantitative survey.

The final version of the survey included bill levels in reference to the average customer bill and also showed figures with and without inflation. We piloted questions about ODIs in testing the survey materials, but found that customers did not understand the principle of ODIs in this form, and could not provide meaningful answers. We therefore dropped these questions from the final survey.



Innovation: Community Hubs

The purpose of the Community Hubs was to target specific 'seldom heard' (or hard to reach) less digitally connected groups. This involved setting up 'research hubs' in local Community Centres in six locations (Rhyl, Hereford, Caernarfon, Carmarthen, Merthyr and Newport). We targeted a higher ratio of older customers, those with lower incomes; long-term unemployed; those on benefits; and those who had some form of disability.

Customers completed the same acceptability survey as our household customers on iPads set up in a community area but they also had the aid of our research field staff if they had trouble understanding questions or using the devices.

This methodology allowed us to engage with more customers in these circumstances than if we were to conduct in home surveys. In total, [209] customers participated in our acceptability research at a Community Hub.

Results: acceptability

The bar chart below shows overall 'uninformed' and 'informed' customer acceptability across all customers:

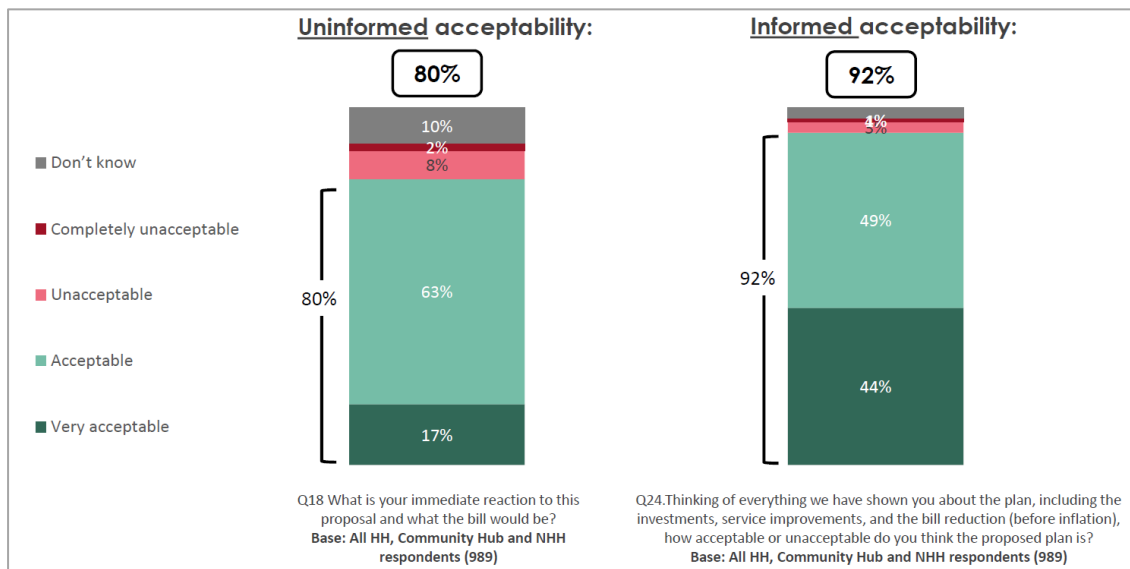


Figure 18 Acceptability results

Below is the detailed breakdown of informed customer acceptability:

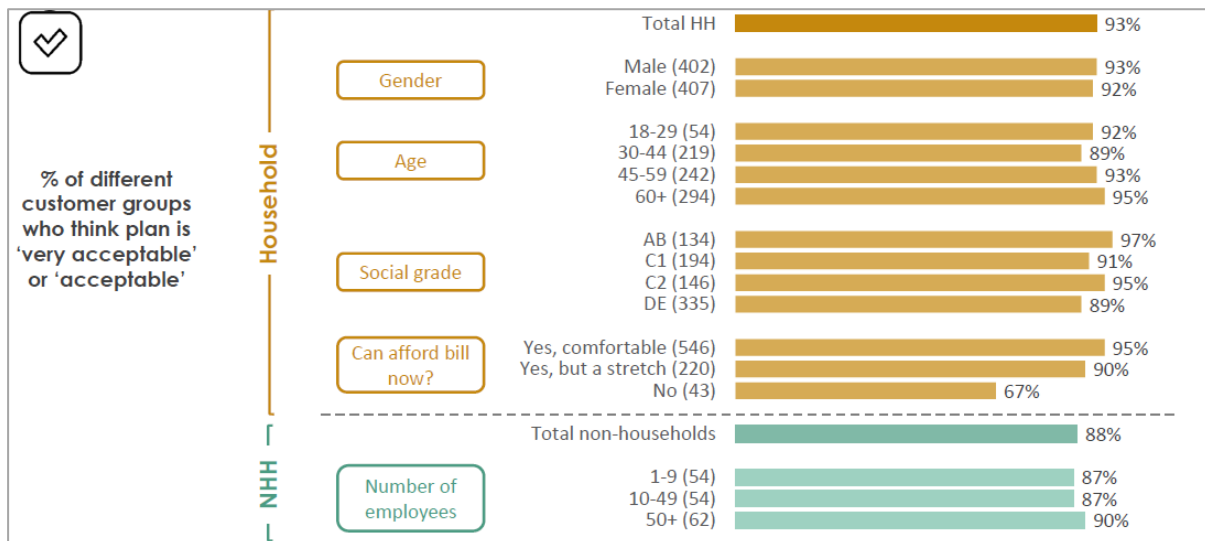


Figure 19 Customer segmental results of informed acceptability

The main drivers of positive acceptability were:

- The fact that Welsh Water is planning ahead: that there is more to our operation than customers realised, and we're protecting future customers from bill rises.
- Our not-for-profit status (most people are now aware of it to some degree)
- Some customers particularly liked some specific aspects of the business plan:
 - Where we are adding value e.g. Project Cartref (Home), social tariffs, lead pipe replacement

- Innovative solutions that are related to the environment, such as RainScape and renewable energy generation
- Customer-centric proposals such as education targets, Priority Services Register
- Customers overall believed that the plan reflects better service for lower bills.

The main drivers of negativity were:

- Personal economic circumstances – specifically affordability.
- Low understanding of Welsh Water and what it does.
- Cynicism – how can bills and costs be cut with so many efficiencies?
- 10% efficiency savings could result in job losses or ‘doing things on the cheap’.
- Some customers perceived they are already paying over the odds.
- Some customers wanted to see more investment, or less investment, depending on their own views and preferences.

Results: ODIs

Our qualitative survey asked customers how they felt about the principle of ODIs. After showing customers the likely range in bills could be we asked how acceptable they felt this was. Due to the very low understanding of ODI's in the cognitive testing and previous research specifically on ODI's suggesting it needs a high amount of explanation before the concept is understood we decided to remove a question on ODIs from the Quantitative survey. The main findings from the qualitative discussion on ODIs were:

- Vulnerable and Family life stages least happy with ODI proposition
- For most, customers have a problem with the principle of ODIs rather than the price range itself
- Incentive model appears to contradict the intuitive idea that quality service leads to customer satisfaction and therefore growth (or profit): here the customer is penalised
- Many see it as unacceptable that the financial bonus is paid for by customers
- £10/2% variation less troubling than the regulatory mechanism underpinning it
- Most can't really see the value of paying more for exceeding targets (reflects general satisfaction with the targets within the plan)

Results: Affordability

Customers were also asked about the affordability of the plan. 95% of customers considered the plan to be affordable, although 30% thought that it would be ‘a stretch’. 99% of non-household customers consider the plan to be affordable, including 20% who considered it to be ‘a stretch’.

Results: Value for Money (VFM)

We asked customer how they felt the plan presented provided value for money. Explaining the plan significantly increases the perceived value for money from the level given for today's service. Overall VFM for the proposed plan is 16 percentage points higher than current VFM (81% vs. 65%). This shows that customer believe the plan is a better service for lower bills and therefore improved value for money. VFM is also higher on average for NHH (83%) than HH (81%) customers.

6. Knowing our customers: segmentation of customer views

6.1. Introduction

We recognise that there is no such thing as an ‘average’ customer. Some customer groups have particular needs and different views. We have analysed the results of our research by different key customer segments so that we can respond appropriately in our business plans. Section 6.2. summarises the results of this ‘pen portraits’ exercise.

In addition, we are increasingly using the data that we gather from our day to day operations to better understand our customers, and we are using statistical analysis and modelling to categorise different groups of customers and ‘predict’ their needs. This work is in its early stages, but a preliminary analysis is provided in section 6.3. below as an indicator of what this analysis can reveal about our customers. We will develop our capability in this area further during the remainder of AMP6 and AMP7.

6.2. Customer segmentations from qualitative research

The tables below summarise the characteristics and particular priorities or views of different household and non-household customer groups that are of interest in the context of PR19. The tables also show how we have responded to the views of these groups of customers in our PR19 plans.

Table 9, for example, shows that for the majority of households, who are have little contact with us, their overall perception of the service is positive and, while value for money is important for them, there is no strong drive to reduce bills. Customers who pay a higher bill relative to their income level, and who have lower awareness of our ‘not for shareholder’ status, are likely to have a worse perception of value for money, and will be more reluctant to support bill increases, and vice versa. However, all customers have a basic set of expectations for the service.



HH customers				
Description	General Attitudes	Particular views/needs		Expectations
Low levels of interaction with company (majority of customers - all social grades).	<ul style="list-style-type: none"> Good quality water and good service experience Limited appreciation of what the company does Med/low awareness of not-for-shareholder status 	<ul style="list-style-type: none"> 75% of customers would prefer to keep bills the same or increase 	<ul style="list-style-type: none"> Clean water which is continuous and safe Educate customer more about how we invest and how customers' money is spent Opt in services for Welsh language options More proactive communications such as how to save water, how to reduce your bill 	<ul style="list-style-type: none"> Time slots for appointments Expectations managed and stick to promises Real time updates Don't want to repeat issues every time they contact us Expect us to be planning for the future More help and advice for issues like water efficiency and ways to reduce bills Proactive communications in emergencies and planned works No deterioration in service-irrespective of bill amount
Customers paying high bill (often unmetered), who assume company is 'for profit', and from lower social grade	<ul style="list-style-type: none"> Worse perception of value for money 'Stretched' economically More worried about inflation Bills are less affordable Shorter term preferences on planning and investment 	<ul style="list-style-type: none"> Tend to prefer bill reductions 		
Customers paying lower bills (often metered), aware of 'not for profit', from higher social grades	<ul style="list-style-type: none"> Better perception of value for money Bills affordable More willing to accept increase in bills to invest for the future 	<ul style="list-style-type: none"> Keep bills the same or small increase to pay for long-term investment 		

Implications

Build awareness of 'not for shareholder' status. Encourage 'struggling to pay' customers onto our social tariffs and/or meters. See PR19 Household Retail Business Plan (Ref 2.5) for details.

Table 10 HH Customers Pen Portraits

Large NHH customers				
Description	General attitudes	Particular needs		Expectations
Businesses with 5-50 ML usage	<ul style="list-style-type: none"> Long term focus More aware than HH of our company and the work we do We respond brilliantly in a crisis and good at our core services Heightened environmental awareness 	<ul style="list-style-type: none"> Better data and metering options More help managing/ understanding bills Responsive and reliable service 		<ul style="list-style-type: none"> 24/7 Contact Support to cut costs and improved billing systems Smart metering to monitor usage Prepare infrastructure for growth and climate risks Technology to match other utilities Investing in renewable energy

PR19 response

Provide larger businesses and other non-household customers with the services they expect. See PR19 Non-household Retail Business Plan (Ref 2.6) for details.

Table 11 Large NHH Customers Pen Portrait



Small NHH customers (SMEs)

Description	General attitudes	Particular needs	Expectations
Small/medium sized businesses with consumption less than 5 ML per annum	<ul style="list-style-type: none"> High awareness of not for profit status Experience is generally positive but group in general are struggling Few have long term plans for their business Local short term mind-set Concerned about economic climate, import/export costs 	<ul style="list-style-type: none"> Help with bills and complaints Quick response More leniency on billing dates Consistent supply 	<ul style="list-style-type: none"> Expectations increasing due to comparison with other sectors who have tracking service. Support to cut costs Smart metering to monitor usage Proactively raise awareness of other services available

PR19 response

Many small non-household customers have similar expectations and concerns to household customers. See PR19 Non-household Retail Business Plan (Ref 2.6) for details.

Table 12 Small NHH Customers Pen Portrait

Vulnerable customers

Description	General attitudes	Particular needs	Expectations
Pre Young Family Older family & empty nesters DE social grades	<ul style="list-style-type: none"> Life is difficult Pessimistic about opportunities More likely to say water bill is a stretch or unaffordable Low awareness of help available 	<ul style="list-style-type: none"> Prioritised in emergency situations Home visits More information about help available from us Broad range of services depending on their circumstances (impaired hearing/stroke etc.) 	<ul style="list-style-type: none"> Long term goals to address the needs of vulnerable customers

PR19 response

Vulnerable customer strategy developed to meet the ongoing needs of these customers, see Ref 3.2.

Table 13 Vulnerable Customers

**'Struggling' customers**

Demographics	Attitudes	Needs	Expectations
<ul style="list-style-type: none"> Lower social classes Lower income Less likely to be on a meter More likely to be living alone 	<ul style="list-style-type: none"> Cynical about large companies Low awareness of help available Don't feel believed or trusted Negative economic outlook Anxious 	<ul style="list-style-type: none"> Need to be aware of issues before they arise Flat bill profile to be able to budget Bill reductions 	<ul style="list-style-type: none"> Long term goals to address the needs of vulnerable customers Be responsive- call them back Given benefit of doubt Actively told of social tariffs

PR19 Response

Affordability strategy developed to ensure we meet the needs of these customers in genuine financial difficulty, see Affordability Strategy (Ref 3.1).

Table 14 Struggling Customers Pen Portrait

'Future customers'

Demographics	Attitudes	Needs	Expectations
<p>Younger, non-bill payers (e.g. students)</p> <p>All social classes</p>	<ul style="list-style-type: none"> ABCs happy/content C2D more concerned about the future Limited awareness of NFP but viewed positively if known 	<ul style="list-style-type: none"> Price sensitive Good proactive communication Service delivers on promises webchat/social media for a speedy response 18-29 more likely to want to pay more now to reduce bills later 	<ul style="list-style-type: none"> Tracking and proactive service updates Two hour time slots with updates Be proactive We should take responsibility for identifying vulnerable customers

PR19 Response

Social tariffs and customer contact options can be found in our PR19 Household Retail Business Plan (Ref 2.5)

Table 15 Future Customers Pen Portrait

'Worst served' customers			
Description	General attitudes	Particular needs	Expectations
Had issues with service in at least 3 consecutive years (OFWAT definition)	<ul style="list-style-type: none"> Corporate image is of a monopoly company, large organisation Become resigned to the problems they receive View of front line being human, friendly and doing their best View of HQ is of insufficient systems and distant relationship 	<ul style="list-style-type: none"> Accessible, responsive, human, caring service from us Regular updates Better proactive communications 	<ul style="list-style-type: none"> Prioritise vulnerable customers in emergency situations Expert advice Deliver on promises Be honest Go the extra mile due to the circumstances Apologise and acknowledge the problem Provide compensation
Implications			
<p>New WaterFair scheme where customers don't pay for a service if they experience repeat problems. We also have a performance commitment to reduce 'worst served' customer numbers (suffering from repeat problems of low pressure, interruptions or sewage flooding).</p>			

Table 16 Worst Served Customers Pen Portrait

6.3. Cluster analysis

Taking a different approach to 'knowing our customers', our Data Science team has started to use both internal and external data sources to capture customers' characteristics, situations and behaviours. This work is still in its early stages, but the results shown below will be the basis for ongoing work during the next AMP to further define and use our customer segmentation in line with the Household and Non-Household Retail Business Plans.

Data was captured within an unsupervised cluster analysis and the results were then analysed using Classification and Regression Tree (CART) analysis. This generates a predictive model to assist in carrying out customer segmentation dynamically, for example to predict which cluster a new customer best aligns.

The cluster analysis reveals that our customer base is most usefully grouped into three primary clusters in both models. For the first model (customers residing in Wales):

- Cluster 1 has around 10% of our customers and its key characteristics include high frequency of billing contacts and high levels of debt
- Cluster 2 has around 46% of our customer base and includes attributes of low frequency of billing contacts and low net weekly income after housing costs

- Cluster 3 has around 44% of our customer base and has traits of low levels of deprivation and higher net weekly incomes

For the second model (customers residing in England):

- Cluster 1 has around 14% of our customers and captures attributes of high billing contacts and levels of debt
- Cluster 2 has around 55% of our customers and includes traits of high levels of living environment deprivation and lower net weekly income after housing costs
- Cluster 3 has around 31% of our customers and includes characteristics of high net weekly incomes after housing costs and low levels of debt.

Further work will be carried out to understand the needs of these different customer groups in the coming years in line with our Household Retail Business Plan (Ref 2.6.)

7. Beyond PR19

We will conduct a 'lessons learned' review of the customer engagement programme. This will include sessions with internal Welsh Water business unit representatives, the research companies contracted for PR19 and with CCG members. This review will provide recommendations which will influence our on-going research strategy.

Using recommendations made from our lessons learned review we will develop a longer term strategy for delivering insight and carrying out customer research for our wider business and on-going research. This will also include how we will aim to share insight with colleagues in the business and understand the needs of the business which would feed into a centralised insight programme.

As we do not have shareholders, we will return any net rewards to customers over the next AMP period. Half would be returned directly to customers via lower average bills, while the other half would be set aside in a 'WaterShare' scheme. We will then consult with customers, regulators and the CCG on how best to return the WaterShare funds to customers, perhaps via extra funding for social tariffs, or investments in service or resilience.

We will continue to align our ongoing customer engagement with the principles outlined in the 'Tapped In' report. All new projects will also be aligned with these principles.

The Rhondda Fach resilient community project will aim to work in at least one new area per year in the next AMP. There are a number of key recommendations from the project which will all be built into the ongoing design of the next project such as including up front customer research before work has started to gauge customer awareness of Welsh Water and services available as well as trust. Future projects should include behaviour change campaigns, such as Let's Stop the Block, early on in the process to allow us to measure the potential impact. This can then be tracked during and after the project. The full list can be found in section 3.2 of this document.

We will continue to report back annually to customers in our Annual Report and Annual performance report. These show how the company is performing against our targets set in our business plan, our financial performance and other aspects of the business such as governance. We are committed to providing a summary of our PR19 submission and sharing this with customers.



Supporting Documents

Research reports

- 1.1A Willingness to Pay (WTP)
- 1.1B Performance Targets Qualitative research
- 1.1C Bills
- 1.1D Welsh Water 2050 Qualitative
- 1.1E Welsh Water 2050 Quantitative (Have your say consultation)
- 1.1F Performance Targets Quantitative research
- 1.1G ODIs
- 1.1H Business Plan Options testing
- 1.1I Acceptability testing
- 1.1J Phase 1 triangulation report

Other documents

- 1. We are welsh water: <http://www.wearewelshwater.com>

Further research reports available on request

- 1. Customer Priorities
- 2. Customer service expectations
- 3. Deep Dive: worst served customers
- 4. Environment
- 5. Water resource management plan: Willingness to Pay Qual
- 6. Water resource management plan: Willingness to Pay Quant
- 7. Customer distributions (Return of Value)
- 8. Vulnerable customers
- 9. Revealed Preferences research
- 10. Phase 1 triangulation supporting evidence
- 11. Social tariffs
- 12. Youth Board reports
- 13. WTP company comparison
- 14. 'Have Your Say' Summer Consultation online community report
- 15. Resilience

Other supporting documents available on request

- 1. Segmentation Pen Portraits – derived from qualitative research
- 2. Willingness to Pay peer review
- 3. Segmentation report Wales from data driven report
- 4. Segmentation report England from data driven report
- 5. Supporting CART analysis doc from data driven report