Our business plan 2020 to 2025

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Our plan…

1. …has been developed in **partnership** with our **customers**
2. …is built on **solid foundations** and **strong** current performance
3. …will **deliver more for customers** through stretching performance targets
4. …is based on a rigorous assessment of **resilience**
5. …**embraces** our culture of **innovation**
6. …is **fully financeable** at an acceptable level of **gearing**
7. …is supported by **strong governance** and even greater transparency
8. …**is affordable** for all with bills falling in real terms and rising steadily below the rate of inflation
9. …has been **fully assured** and our Customer Scrutiny Panel agrees it reflects our customers' priorities
10. …**demonstrates our vision of delivering service excellence** to all

Our Business Plan for 2020 to 2025 will deliver more for our customers and is focused on what matters most to them. We've developed it in partnership and it will deliver a series of pledges that represent their priorities.

Our pledges will be delivered through stretching performance targets, many of which are financially incentivised, to make sure we improve performance and service levels in-line with our customers' expectations.

Our plan is affordable for all – now and in the future. It incorporates action to address a range of risks and challenges, delivering the concept of long-term resilience in the round, and putting customers and the environment at its heart.

It's fully financeable, will be delivered efficiently and will be underpinned by strong leadership and governance with transparency of decision making and performance. This, together with improved service, will increase the confidence of our customers and ensure we are a trusted member of the community that makes a valued contribution.

We are building on solid foundations. Our performance in key areas such as supply interruptions, mains bursts, water quality customer contacts and leakage has set the bar for the industry and this plan will go further still. Our assets are in good condition because of past and current investment and strong operational stewardship. We're focused on how we further increase our understanding of our network using smart technology and advanced assessment techniques, so we target investment even more accurately and efficiently to further improve our service and resilience. Our Board has long recognised the importance of strong corporate governance and we are an exemplar in this area – but we will do more. It will be delivered by our highly-skilled and committed people who will continue to act in the interests of our customers.

Our plan for 2020 to 2025 is set in the context of the longer term and addresses some key challenges. Our location in a high-growth, water stressed area means we will take bold action to reduce leakage and customer usage – expected by our customers. The ongoing questions around the legitimacy and financing of the industry have led us to take rapid action to reduce our level of borrowing in-line with Ofwat's expectations and ensure we are on an even firmer financial footing. And while customer expectations continue to rise, we will keep up; building on the improvements we are making – including the biggest digital investment in our history – to offer a service that will see us compared with the leading providers of excellent customer service.

Created in partnership

Our plan is customer-led and has been created in partnership with our customers. We've had contact with nearly 3,000 people and collaborated with community groups and other stakeholders to help us reach across the different segments of our customer base – including the most vulnerable – to understand different views and priorities.

We've gone beyond just listening. Using a range of innovative techniques, we've involved customers in shaping our future services – something we'll do more of as we deliver our plan. We've taken the opportunity to educate for the here and now, framing our research activity in a way that increases customer understanding about current and future issues, such as the impact of prolonged dry weather on water resources.

Together with the insight we collect through our day-to-day transactions, we are confident we understand our customers' priorities better than ever before and have validated our findings through a robust process of triangulation. Where customers were unable to give us a clear mandate, we tested options further and for both leakage and usage reductions, we've set more stretching targets as a result.

All this has been scrutinised and challenged by our independent Customer Scrutiny Panel who agree that we have carried out a high quality engagement programme which has strongly influenced our plan.

Delivering more of what matters

This has led to us making five pledges that we'll deliver between 2020 and 2025:

Our pledges are supported by 24 performance commitments which reflect our customer priorities and will deliver stretching performance – which we believe will set the standard for the industry in key areas such as interruptions to supply, burst mains and leakage reductions.

Of our performance commitments, 11 have financial penalties associated with them if we underperform, nine of which will also have an outperformance incentive. In general, these are the commitments that customers have said they value most. Payments and/or penalties will flow through to customer bills and this will happen 'in period', so performance in one year will impact on bills two years later.

Affordable for all

We recognise that some people struggle to pay for our service and we'll more than double the number of customers who receive extra help through our Water Support Scheme to 19,000, which we've redesigned through co-creation with expert customer representatives.

Those customers who don't require financial assistance will see their bills fall by an average of £13 (before inflation) between 2020 and 2025, despite us increasing investment in our services to £126 million over the period – more than £400 of investment per household. Inflation will impact on how much people pay but we are profiling our bills so they rise steadily across the five years, below the rate of inflation.

Delivering a service that's ready for the future

We have a strong track record of planning and investing for the long term and this has provided the bedrock of our solid performance over many years. In developing our plan we've carried out the most comprehensive assessment into the risks we face to date and prioritised them using a robust, systematic method. This has covered all areas of our business – embracing 'resilience in the round' – and the process has helped us improve our approach to corporate risk management, resulting in the creation of a fully integrated model for the Company.

We recognise that the type and nature of threats are changing and so must the way we mitigate them. We've used the Government's four Rs approach – resistance, reliability, redundancy and response & recovery – to identify mitigations for all risks. This means we are taking a range of actions, rebalancing our reliance on redundancy which has typically formed the basis of the resilience approach across the water sector, moving us more towards resistance and reliability.

This can be seen in our increased investment in network connectivity, a long-term programme that will culminate in 2025 with us being able to supply every single customer from more than one treatment works through enhancing Bough Beech Treatment Works, upgrading key pumping stations and installing strategic pipelines.

Our plan is aligned with our Water Resources Management Plan – increasing protection against drought and delivering sustained leakage and usage reductions. This will be supported through increased metering – including the introduction of smart devices, along with practical water efficiency advice and a commitment to engagement with customers of all ages. Together, this will lead to greater long-term resilience and sustainability of our resources.

Our resilience activity stretches beyond operational activity and, among other things, will see us taking further steps to increase the resilience of our workforce who are central to delivering our service. We'll identify the long-term skills needed and focus on strong succession planning, enhanced recruitment and upskilling so that our people can meet the needs of our customers – now and in the future.

Supported by a culture of innovation and enhanced use of markets

To achieve all this, we'll find ways to do things better than before. We have a strong culture of trying new approaches and have, over the years, delivered some key innovations that have benefitted the wider industry and all water customers. This is one of the major benefits of our small size, as we are agile decision-makers and have created an environment where thinking innovatively is encouraged and rewarded. Our long-term ambition is to develop an intelligent network that gives us real-time information about how it's operating so we can react quickly to issues before they become a problem for customers. Together with developing ways to assess the condition of our below-ground assets without needing to dig them up, we'll take pre-emptive action, so customers won't experience difficulties and will receive great service.

We expect the market opening for water resources to promote innovation in the provision of new options to help increase the long-term resilience of water supplies at costs lower than they would otherwise be. We will play our role in this process as an active member of the Water Resources in the South East (WRSE) group – who strongly advocate this enhanced agenda – in the expansion, development and optimisation of regional and inter-regional water resource planning. The development of the latest WRSE strategy has seen significantly more co-ordination between member companies both at strategic and technical levels than ever before. Together we are committed to continuing our collaborative work, for the benefit of all customers and the environment.

Underpinned by strong governance

Our Board recognises the importance of strong leadership, transparency and governance and we are already following Ofwat's principles and delivering much of what has been identified as strong performance in this area. This includes our independent non-executive directors making up the biggest group on our Board.

Our dividend policy has resulted in dividends that have not been excessive, are linked to delivering strong performance and are in-line with Ofwat's expected returns. But we will be clearer on how we make our decisions about the level and timing of returns our shareholders receive. We will also review our executive pay policy, so it is linked more closely to delivering for our customers.

Financeable and efficient

The total cost of our plan is £286 million, which includes making £21 million of efficiency savings between 2020 and 2025.

We recognise the importance of Ofwat's agenda to put the sector back in balance and have already taken decisive action. By the start of 2020 we will have reduced our level of gearing from 77% to below 60% - increasing our financial resilience. We've assessed a broad range of risks – both prescribed and company-specific – through to 2030 and our increased level of equity means that we are in a strong position to raise finance if we need it. We have, in addition, received an undertaking from our shareholders that they will provide additional investment, if needed, in a scenario where multiple risks occur at the same time.

Our plan assumes a wholesale weighted average cost of capital (WACC) of 3.45%, deviating from Ofwat's indicative guidance with a company-specific adjustment to the cost of debt, reflecting our position as a small company. We believe this is justified to address the higher costs we face when securing finance. We've demonstrated that our existing borrowing is efficient, our customers strongly support paying slightly more to be served by a small company and our size means we deliver benefits to all water customers, particularly in setting frontier-shifting performance standards and driving innovation.

Fully assured and supported by customers

The data, modelling and assumptions that have been used to build our plan have been independently assured and our Board has provided a full assurance statement that supports our plan.

We tested a draft version of our plan with customers, who demonstrated strong support for the package of service improvements we will deliver. Where they wanted us to go further – to reduce leakage and usage – we have.

Our plan has the support of our full Board who are committed to its delivery over the 2020 to 2025 period.

At the core of our business plan are four key themes – resilience, customer service, affordability and innovation. These themes not only underpin the PR19 Methodology but are vital in delivering what matters most to our customers and ensuring that we continue to thrive as a business.

So pivotal are the four themes to our plan that our independent non-executive directors and chairman are championing them and below they describe what their chosen theme means to them and the delivery of the commitments we are making to our customers.

Look out for these icons as you read our plan where we highlight specific examples:

Customer service

"The service we provide is much more than an online transaction or a call to a contact centre. Water is a critical part of daily life and if it's not there it's not long before people notice, and life becomes difficult.

For our customers, great service means that high quality water is always there when they need it and it tastes, smells and looks great. They tend to only contact us if there is a problem and when there is, they want it resolved quickly and the experience to be effortless. Therefore, our aim is to prevent a problem occurring in the first place, which is why our work to make our operations more resilient and use innovative technology such as real-time data and automation is so essential. Our pledges to, 'supply high quality water all day, every day' and 'a service that is fit now and for the future' are critical to delivering an excellent and sustainable service.

At the same time, we want to be there for our customers when they do need us, regardless of when, why or how they contact us. Whether it's by phone, online, whilst we carry out improvement work or via social media, we strive for every interaction with our customers to be the warm, friendly, efficient service that they should rightly expect from a local business with deep roots in the area we serve.

We understand that our household customers cannot choose who supplies them. However, we seek to offer a standard of service and value for money as if we were competing for their business every single day and to be recognised alongside leading brands for exceeding expectations.

Digital technology is key. We know that many customers like and value the flexibility it offers so we will make significant investment to allow our customers to manage their interactions with us at the touch of a button – whenever it suits them.

The substantial investment we are making in digital, in our Customer Relationship Management and billing systems, and in the development of our customer service staff, will ensure that we improve our customer service scores as we transition from SIM to C-MeX. We welcome the broader assessment of customer satisfaction because it will measure and drive an even greater focus on the important role we play within the local community and in acting as a responsible business. We also welcome the introduction of D-MeX as we work hard to ensure property developers are satisfied with the supply connection service we provide.

In our community, we will be more visible on the ground. Whether it's supporting the vulnerable, those struggling to pay, fitting meters, helping customers to reduce how much water they use or finding and fixing leaks, we will be there.

We are a small local business. Heavily vested in our community. That is why customers are at the heart of our plan.**"**

Resilience

"We provide a service that is critical to daily life. If we fail and people can't access the water they need, the impact is immediate. At best it causes a temporary inconvenience, at worst it can risk public health and threaten the economy, so our plan is focused on how we increase our resilience to a range of short and long-term risks and challenges.

Resilience is the ability to cope with, and recover from, disruption and anticipate trends and variability, in order to maintain services for people and protect the natural environment now and in the future.

In preparing our plan we have reviewed a full range of risks that have the potential to impact our service and assessed their consequences. Our resilience in the round plan puts providing customers with great service and protecting the environment at its heart and includes:

Customers tell us that keeping their homes supplied with high-quality water is their top priority. To do this we'll further enhance our network, so we can better control the distribution of water across our area. By 2025, we'll be able to supply every customer from more than one treatment works, reducing the risk that they lose supplies. As well as increasing our resilience to short-term events it will help us manage drought situations as we'll have a crucial link between the north and south of our area. The work on our network is an important aspect of our future water resource management plans, as well as collaborating with neighbouring water companies to consider water transfer plans and other initiatives.

To further increase our long-term resilience to drought we need to make the water we have go further. We are committed to reducing leakage by 15% by 2025 – as the first step towards more than halving it by 2045 – something our customers tell us is a priority. In parallel, we'll help our customers reduce how much they use in their homes and businesses by cutting water usage by more than 7% over the next five years and further in the years to come. To do this, we aim to meter the vast majority of our customers over the next five years and make smart water meters the norm by 2030. With more information about their water supply at their fingertips, customers will be better able to identify the water that is lost from their pipes and help us reduce leakage too.

Improving our network alone will not deliver the resilience needed. It must be supported by activity across the business. We need to fund the investment we make through a robust financial strategy that can withstand changes in the investor market and to the wider economy. We have taken decisive steps to enhance our long-term financial resilience.

We need to be one-step ahead in the fast-moving world of IT and communications, with cyber security to protect both our assets and our customers' data at the forefront of digital technology developments. Many mitigations have been put in place to date including multiple layers of security and controlled access to systems.

We rely heavily on a large and varied supply chain and we need this to be reliable and high quality, so we don't compromise our service. We'll continue to invest in our relationships with key supply partners and ensure our contracting and auditing process is robust yet flexible enough to take account of changing requirements such as new legislation.

Our people are critical to everything we do – both our workforce today and that of tomorrow. In the short-term we need to attract, develop and retain the best talent. In the long-term we know the face of our workforce will change as our business evolves, and so will the skills we need. Our people strategy recognises the challenges we need to overcome and the opportunities we need to exploit.

Our plan addresses resilience in the round through proactive management of risks and addressing them before they impact on our customers. From investing in our network to ensuring that our employees are the best that they can be, we recognise the essential service we provide and how important it is to be resilient in all areas not just today, but far into the future too.**"**

Innovation

"For us, innovation is about trying new things or methods of doing something with the aim of sustainably improving our performance for our customers. Innovation will play a key role in delivering our five pledges and is critical to driving service up and costs down – so our customers receive more for less and our business is ready for the future.

We have a long history of innovation. We were the first company in the UK to use ultra-violet light to treat cryptosporidium in raw water and to work with Google to develop and rollout their pioneering mobile work solution for handheld devices. Our small size has not stopped us from taking a leading role, in fact it's enabled it, as we're agile, adaptive and have influenced the wider industry. We appointed a dedicated Innovation Manager in 2015 and we continue to test pioneering new technology and approaches to improve our service.

Innovation needs the right culture, so ideas can be developed, and our approach is centred around empowering our employees to come forward with ideas and commit to delivering them. Many ideas have been progressed and are improving our business today, such as introducing Mental Health First Aiders or our community events trailer with interactive games which helps to spread our water saving messages. We map and track all our projects on our intranet, so they are visible, and this helps drive collaboration between teams. Delivering innovation is so important to us that we ask employees in their annual appraisal about their individual contribution to making the company more innovative.

We can't do this alone. Innovation requires partnership and collaboration with a range of parties. We're open about the problems we need to solve and ask for help – whether that's by working with other water companies, our shareholders, other in-house companies, the supply chain, start-up businesses, academics or our customers. We don't always choose the obvious partner – in assessing smart metering solutions we've not just worked with producers of meters, but experts in network communications, so as we develop our smart network of the future, all of the parts will work together. We need customers to participate too. As we trial smart meters we're going to involve customers in helping us to assess the best solution that meets their needs.

Innovation is not just about technology, but it does play a big part in delivering better services both now and in the future. Pre-empting issues before they become a problem is a top priority for us and drives much of our innovative work. If we get it right our customers will experience great service and it will make us more efficient by better targeting investment. The use of real-time data, automation and the ability to assess the condition of our pipes and pumps while they are still running means we'll be able to address issues earlier and stop them from impacting on customers.

Technology alone is not enough to deliver great service. We're also being innovative in our partnerships and communication, so we reach and engage our customers in new and different ways. We are committed to helping more people pay their bills and get the support they need and we're working with local foodbanks across our area to help us identify and reach customers who need our help most.

Culture	Strategy	Collaboration	Financing
supportive and empowering	prioritised, focused and one-step ahead	partnerships and openness	sufficient and sustainable

Underpinning our work is a strategy that makes sure we are prioritising the right things, tracking progress and providing the right level of support. We’ve always got our eye on what’s coming next, so we can get one-step ahead and to deliver more of what matters most to customers we will continue to innovate.”

Affordability

"Everybody needs water and it's right that everybody can afford to pay for it. At the same time, we need to invest not only to provide a great service today but also to make sure our future customers receive a great service tomorrow.

We've progressively been replacing and upgrading our infrastructure which means we have amongst the lowest levels of leakage, burst mains and interruptions to supply, and provide some of the highest quality water, which are priorities for our customers. We have achieved this – and soften water from groundwater sources – for no more than the average bill for the industry. Nevertheless, there is clearly room for further reductions and we aim to do more.

We are facing considerable and varied challenges in the future – an increasing population, climate change, higher environmental standards as well as ever-increasing customer expectations – so we must continue to invest to address these issues and avoid burdening future generations with increased costs in the future. Our customers agree – they want us to invest in our network now and be ready for the future.

Our Business Plan strikes a balance between increased investment in what matters most to customers and keeping bills affordable. We are proposing an investment programme of £126 million over the next five years, which will deliver significant improvements in service levels. However, overall costs to customers before inflation will fall, through a combination of efficiency and finance savings, while still delivering around £23 of additional investment per household per year compared to the current period. This means that we can get ahead and address future challenges and increase resilience, whilst ensuring that bills will remain affordable in the longer term.

Alongside this we are committed to doing more to help those that are struggling to pay for our service, despite already being a top performer in this area. Although much of our area is considered 'affluent', we still have many customers facing financial hardship. We plan to do this by helping at least 19,000 people by 2025 – double the current level and nearly four times the number we promised at the last price review – through our Water Support Scheme that offers a reduced bill. We've worked with experts from our community, including Citizens Advice, to help us re-design this discounted tariff so it's accessible to those who need it most and easier to apply.

This is part of a wider affordability strategy that aims to provide targeted help, payment programmes and discounts with the aim of making our bills affordable for all and increase the number of customers who pay. As we speed up our metering programme we know bill rises will be a concern for some as they begin to pay for what they actually use, so our plans include support for those who need it to lessen the impact, while also helping them to save water.

Building on our well-established community links and developing new partnerships with third parties will be critical to our success. The foundations for this are being established now by enhancing our field-based teams and their expertise in connecting and collaborating with customers, communities and local organisations that will help us reach those that need the most help. We want to empower them to take back control, start making regular payments and get out of the cycle of debt.

Together it means our bills will be affordable for all – now and in the future – with extra help for those that need it most.”

CHAPTER 1

Engaging with our customers

We have been talking to our customers about their needs and priorities to make sure we focus our plan on what matters most

In this chapter you will hear about

- Our 'Talk on Water' engagement programme which has seen us hear from more people than ever before in lots of different and innovative ways.
- How we have reflected what we have heard in the development of our plan.
- How we will continue engaging with our customers as we deliver our plan.

Engaging with our customers

Section one: Our engagement programme at a glance

- What we did – enhancing our approach
- How we did it – engagement methods and techniques
- What we heard – customer priorities and preferences
- What we'll deliver – how insight shaped our plan

Section two: Our engagement programme in detail

Developing a customer-led business plan – our engagement strategy

Here we set out our strategy that delivered a high-quality programme of engagement that directly influenced our plan. It covers:

- Our objectives
- Phasing of the programme and sources of insight
- Audiences and segmentation
- How we've addressed Ofwat's key themes
- Customer participation
- Assurance and governance
- Beyond the price review.

Engagement methods and techniques

Here we provide details of the research methodology for each phase and the different techniques we used to gather high quality insight for our plan. We also explain our approach to triangulating the research findings and validating the outcomes.

Customer insight – priorities and preferences

Here we report back on what customers told us at each stage of the research about what they want from our service.

Influence on our Business Plan

Here we show how the customer insight has shaped what we deliver in our plan and the targets we have set ourselves, so we deliver more of what matters to customers.

Section One: Our engagement programme at a glance

What we did – enhancing our approach

PR14 included the most extensive customer engagement programme ever undertaken by the Company, which was highly regarded by Ofwat. A review of our specific activity, as well as Ofwat's evaluation of what the sector did and its expectations for PR19, has led to the following enhancements to our engagement activity for PR19:

We've improved our strategic approach by:

Delivering our programme through three distinct phases using the output from each stage to inform the next, so it's customer-led and focused on the areas that matter most to customers

Using three key sources of insight – bespoke research, business as usual information from customers and wider communication channels – that we've triangulated so we understand customer priorities

Working with new and independent research partners, chosen for their expertise and specialisms to increase the quality of our engagement and credibility of our findings

Developing an overarching brand – Talk on Water – across all our engagement activity to increase visibility and engagement

Using insight to help us design our future services through co-creation

We've improved our engagement techniques and methods by:

Having a 'listening and learning' first phase of qualitative research using innovative techniques to help customers think about their priorities including a smartphone app to log water moments and a video diary about water deprivation

Using an enhanced and more understandable approach to willingness to pay (WTP) research that has moved us away from a single number approach to a range of valuations across customer groups

Using information about current performance to help frame our discussions

Turning our engagement programme into an education activity through discussions about the dry winter situation and by taking future customers to our Bough Beech education centre

Producing customer-friendly consultation documents for our Long-Term Vision, draft Water Resources Management Plan (dWRMP) and draft Business Plan

We've improved the reach of our engagement programme by:

Engaging with nearly 3,000 customers and staying in touch with research participants to include them in further activity and demonstrate what we have done with their views

Engaging specifically with vulnerable customers and those that support them through dedicated community-based activity including visiting local foodbanks

Dedicated engagement with customers of the future to help understand their views and priorities

Establishing an online community engagement forum for ongoing discussion and polls

Supporting the programme with a communications campaign to encourage customers to get involved in the process including attendance at local events

Conducting in-depth interviews with 'expert' stakeholders to test customer findings

Involving our employees at every stage so they have a say in what they deliver for customers

How we did it – engagement methods and techniques

	PHASE 1 Listen, learn and inform	PHASE 2 Test and review	PHASE 3 Seeing the full picture
Bespoke activity	Qualitative pre-tasked workshops with: • Household customers • Business customers • Future customers In-home interviews with a mix of vulnerable customers	Co-creative workshop with household customers Future customer workshop at Bough Beech Treatment Works Vulnerable customer research through existing community support groups, including a foodbank In-depth stakeholder interviews Willingness to pay research with household and business customers	Draft plan acceptability research with household and business customers Social tariff co-design sprint and customer workshops about vulnerability Interviews with community representatives Research into the acceptability of a small company premium
Business as usual insight	Complaints root cause analysis Quarterly domestic customer tracker survey	Ofwat SIM survey Customer feedback through our billing system	Shadow SIM survey data Supply chain partner research
Channels	Talk on Water branded website pages Public consultation on our Long-Term Vision	Public consultation on our draft Water Resources Management Plan Online customer community forum Media and social channels	Public consultation on our draft Business Plan Online customer community forum Community events Media and social channels

What we heard – customer priorities and preferences

Our engagement programme was deliberately phased, so we began by listening to the unprompted views of customers and finished by checking that what we heard – and planned to do as a result – was right for them.

PHASE 1 - YOU SAID:

Get the basics right

High quality water is your top priority

Great service from a local contact centre

A reliable and resilient service now and in the future

Reduce the number of burst pipes

Communicate clearly when problems happen

Serious pollution is unacceptable

Bills and tariffs should be fair

Leakage level is unacceptable even if the annual target is met

Go further in some areas

Embrace smart technology

Help customers take control of their water use and bills

Work with schools to engage the next generation

Provide a range of support to help cut usage

Be future-focused to address climate change and environmental concerns

Innovate to develop sustainable and resilient supplies

Recycle more water and incentivise people to use less

PHASE 2 - YOU SAID:

You care about

Water being high quality and it must taste, smell and look great

Unplanned interruptions to supply longer than three hours

Reducing risk of droughts by investing in infrastructure, leakage and behaviour change

Metering – it's acceptable, but must be well supported and incentivised

Educating customers about water

Experiencing an easy, responsive customer journey

You are willing to pay for

Service improvements that will protect all homes from the risk of supply failures

Reducing supply interruptions and leakage

The wider roll-out of our metering programme

Our local contact centre

Education and water efficiency activity - but be mindful of appetite to pay more

PHASE 3 - YOU SAID:

More than three quarters of you (76%) accepted our proposed pledges and performance commitments

Many of you (42%) said we should go further to reduce leakage by 15% and over a third of you (36%) said to do more to cut usage by 8%

Over half of you (54%) were willing to pay a £6 supplement to help fund a 50% bill discount to 25,000 eligible customers but 46% of you said we should offer financial support to fewer people

The majority of you (82%) were willing to pay a little more to be served by a small company

Five **pledges** to our customers

24 **performance commitments**

What we'll deliver – how insight shaped our plan

You said....	We will....
High quality water is your top priority	Aim for the highest level of compliance with Drinking Water Inspectorate standards and pay a penalty if we fail to meet them
The look, taste and smell of your water really matters	Target areas where this is a problem, deliver improvements and retain our stretching target on minimising contacts
Having a reliable supply of water is essential	Deliver industry-leading performance by achieving stretching targets for supply interruptions and reducing burst mains
You expect us to do more to bring down leakage – a 12% reduction was not enough	Target a 15% reduction by 2025, which is further than we proposed in our draft plan
You want us to invest in making our service more resilient	Enhance our network so that all of you can be supplied by more than one treatment works and we can move water around our area more easily
You want us to help you reduce demand and metering is an acceptable way to do this – a 6% reduction was not enough	Aim to reduce household usage by over 7% by installing more water meters at a faster rate and providing you with help, support and more information about what you use
Educating customers and future customers about the value of water is important	Construct a new education centre at Elmer Water Treatment Works at minimal cost to our customers
You value us being a small company with a locally based contact centre	Keep our contact centre in our supply area to provide a local service and support jobs in the area
Use new technology to deliver a better service	Make our network smarter by rolling out real-time monitoring and smart meters
Supporting people who are genuinely struggling to pay their bill is important	Improve and re-launch our Water Support Scheme and more than double the number of people who receive it
There is more we can do to help those experiencing difficult times	We'll do more to promote our Helping Hand Scheme and work with partners in the community to make sure it reaches those that need it
We should protect and enhance the local environment	We'll reduce our carbon emissions, invest to improve local rivers and increase the biodiversity of our sites

Section two – Our engagement programme in detail

Developing a customer-led business plan – our engagement strategy

Our Business Plan delivers more of what matters to our customers. To make sure we fully understood our customers' views, priorities and preferences we undertook a high-quality programme of engagement that provided the insight we have used to develop our plan.

We developed our engagement strategy from the outset to guide our activity and set ourselves four key objectives:

1. Deliver a programme of high quality engagement by:
    - Allowing customers to lead the conversation through a phased approach to engagement, understand what matters most to them and build our engagement activity and future plans around their priorities
    - Using a wider range of customer insight and a variety of methods and channels to increase the depth of our understanding about customers' priorities and option preferences
    - Engaging with a robust number of representative customers giving breadth to our engagement programme
    - Communicating effectively so all customers can provide an informed view using a new 'Talk on Water' brand to bring together all engagement activity and provide a clear call to action.
2. Understand customers' views on Ofwat's key themes – resilience, affordability, customer service and innovation – so the business plan activity to address these areas clearly reflects customers' priorities
3. Increase customer participation by providing opportunities to co-create future services and identify ways customers can be more involved in their delivery
4. Demonstrate how engagement has shaped our Business Plan through a clear and transparent process, including using an appropriate method of triangulation to bring together different sources of insight and address any conflicts.

Our Customer Scrutiny Panel (CSP) scrutinised our strategy and the quality of engagement activity throughout the process and had the opportunity to challenge us on our approach. Their input has helped us shape and refine our programme.

As the first five years of our Water Resources Management Plan (WRMP) is delivered through our Business Plan, the findings of our engagement activity also influenced our WRMP proposals, particularly around long-term issues like the impact of population growth and climate change.

We have stepped up our activity at PR19 to carry out a wide-ranging and high-quality programme of engagement – see our summary of how we enhanced our approach on page 2.

Objective 1 - Deliver a programme of high quality engagement

Customer-led phased approach

We wanted our customers to lead the conversation with us, so we engaged with them on the things that mattered most to them. To do this we took a phased approach to engagement, where the results of the first phase were used to inform the focus and activity in the next.

PHASE ONE

Listen, learn and inform

Gathering views on customer priorities and the longer term

PHASE TWO

Test and review

Quantitative research on performance commitments and co-creation of future services

PHASE THREE

Seeing the full picture

Acceptability of the Business Plan

Sources of insight, methods and channels

During each phase of our engagement programme we used a range of insight sources, a variety of engagement methods and a number of different channels. We did not rely solely on the insight gathered through formal research but also considered information collected through our business as usual processes and transactions and through consultation and communication with our customers. Our three main sources of insight are:

Bespoke	• Specific research programme to gather formal views and insights to complement what we already know • Carried out by specialist partners to fulfill specific research objectives
Insights	• Information that we already have about our customers from business as usual sources and contacts – need insight, not just data • Use to triangulate research findings
Channels	• Using the channels we already have and new ones to complement the research programme

Bespoke research:

Our bespoke research programme was carried out across the three phases in partnership with specialist delivery partners. It included a balance of quantitative and qualitative methods allowing us to capture a wide range of customers' views whilst also exploring key issues in greater depth. We used a range of forums including in-home depth interviews, online surveys, small workshops and community-based events to support our dialogue with different customers. Throughout the programme we heard the views of customers who are vulnerable and harder to reach. They were included in the willingness to pay research as well as dedicated in-home interviews, a customer workshop, stakeholder interviews and through community outreach in association with partners such as the Caterham Foodbank.

Customer insight:

We analysed and interpreted a range of pre-existing customer insight that we capture through our business as usual processes. This included SIM survey results, our quarterly tracker survey and regular text surveys, alongside comments captured through our billing system and customer complaints. We also made use of primary research conducted by some supply chain partners for their own business planning processes.

We assessed information in terms of its reliability, robustness and how representative it is of customers' views and used the triangulation process to test this – identifying any conflicts that emerge and explaining potential trade-offs within the plan.

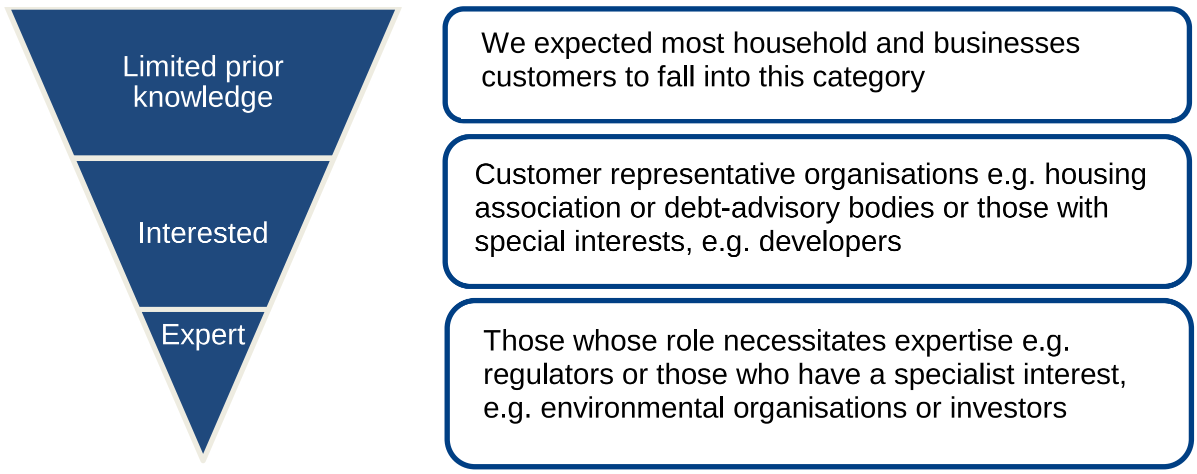
Communication channels:

We used our existing channels such as social media, electronic newsletters, stakeholder bulletins and our website to raise awareness of our future plans and ways to get involved in the conversation. We implemented an innovative online engagement tool that has provided a new channel for continued dialogue with customers and stakeholders beyond the price review process. We also carried out a range of communication activity to support the formal consultation around our draft Water Resources Management Plan and our draft Business Plan. This included sending copies to local MPs, council leaders, offering personal briefings to local stakeholders and also sending the documents to previous research participants.

Audiences and segmentation

The primary focus of the engagement programme is customers, but it was supported by engagement with key stakeholders – those that represent customers or who have an interest in what and how the Company delivers.

We recognised that different customers would have a different level of knowledge and to engage effectively, we needed to tailor our approach to meet their needs and interests – so it was meaningful to them. We identified three clear segments:



Customer engagement:

We knew that most of our customers would fall into the limited prior knowledge category although some will be interested, often because of a local issue they may have experienced or been involved in. Our engagement programme reached:

- Household and business customers
- A range of demographic groups e.g. based on gender, age or socio-economic group
- Customers from different parts of the supply area
- Customers with financial difficulties or who may be vulnerable for another reason
- Future bill payers (aged 16 to 24), particularly around longer-term issues.

The first phase of research identified three broad segments with different attitudes (and therefore behaviours) towards water which were further explored through the programme.

Stakeholder engagement:

Stakeholders who represent certain groups of customers can act as both an additional source of insight and expertise and may be able to facilitate engagement, particularly with hard to reach customers they represent. They also play an important role when playing back what we have heard from customers to test acceptability of the findings. Including stakeholder insight within the triangulation process used to develop our Business Plan was important to show how we have addressed areas of conflict between groups with different interests and motivations.

We engaged with a range of stakeholders including:

- Our regulators – CCWater, Drinking Water Inspectorate, Environment Agency, Natural England and Ofwat
- Those that represent specific local communities (e.g. MPs, councillors, community groups)
- Those that work on behalf of certain groups and understand their needs with whom the Company has a common objective to help customers (e.g. debt advice organisations, charities)
- Organisations that have specific interest and expertise in environmental matters and objectives that we may play a role in delivering (e.g. national and local environmental groups)
- Those that represent key industries with a specific reliance or interest in water (e.g. National Farmers Union, Horticultural Trades Association, Home Builders Federation)
- Retailers serving business customers.

Our employees:

Our employees were also a key audience and a source of great insight and ideas. A key part of our culture is to encourage employees to think differently and promote great ideas. We also involved them so they understand and are ready to deliver the plan. We divided our employee engagement into three main areas:

Awareness – updates on the business planning process through established internal channels

Accountability – for specific aspects of the business planning process such as developing business cases and attending plan development workshops

Contribution – dedicated activity to enable input from all, including a series of ‘roundtable’ discussion sessions with our directors across our sites.

Communication:

Clear and concise communication was at the heart of our approach so all those involved:

- Understood what was being discussed with them
- Were able to provide a considered and informed view
- Were listened to, learnt from and valued being involved in the process.

We made sure that engagement material was clear, appropriate and tailored to address knowledge levels and suit the channel being used. Our CSP had the opportunity to scrutinise the quality of our engagement approach and material throughout the process.

We were open and honest with customers and stakeholders about our current performance and used comparative information where available and relevant to put our performance into context.

We made engagement material relevant to our customers, so it reflects our individual Company circumstances, particularly in relation to long-term issues and local challenges, to support meaningful, two-way dialogue.

'Talk on Water', which was tested with customers, was developed as a sub-brand across all our engagement activity, so there was a distinct look and feel and customers could identify their contribution to our plans. Given the technical nature of our industry and the fact that most customers rarely think about our service, we wanted to use a simple but effective slogan that was easy to recognise. We developed a common narrative that was flexed across a range of channels and our intention is to continue this beyond the business plan, so it acts as an umbrella for our ongoing engagement activity.

We prepared public-facing documents for our Long-Term Vision, Draft Water Resources Management Plan, which has a statutory consultation period, and our draft Business Plan. These were promoted across a range of channels to encourage customer participation in the process. These are available in Appendices A1.8 – A1.10.

Objective 2 - Understand customers' views on Ofwat's key themes

Ofwat identified four key themes that they expect to be at the heart of our Business Plan:

- Great customer service
- Resilience in the round
- Affordability
- Innovation.

To make sure that our plan reflected customers' views and expectations for each of the themes, we addressed them at each phase of our research. Different methods were used with different audiences to make sure that the themes were discussed fully and appropriately. Examples include:

	Affordability	Innovation	Resilience	Service
Phase one	**In-home interview**: Current support for financially vulnerable customers	**Workshop**: Digitalisation of our services	**Workshop**: Prioritisation of brilliant basics both now and in the future	**Workshop**: The importance of being a local service provider
Phase two	**Event**: Engaging with specific community groups, e.g. foodbanks **Survey**: Testing appetite for bill increases/decreases including financially vulnerable customers	**Survey**: Willingness to pay (WTP) for a new education centre	**Survey**: WTP for mains replacements, leakage and resilient supply **Workshop**: Focus on dry winters, resilience and investment	**Workshop**: Designing customer journeys of the future with our customers of the future
Phase three	**Workshop:** Design sprint with subject matter experts to co-create our new social tariff offering	Acceptability and testing of conclusions from customer research findings		**Video and 121 survey:** Acceptability of a small company premium

Our Board is committed to delivering the four key themes through our plan, so each of our independent non-executive directors and chairman championed a theme to make sure the engagement was comprehensive, and the plan delivers customer priorities. Our CSP also mirrored this approach to scrutinise each theme in detail.

Objective 3 - Increase customer participation

In June 2017 Ofwat published 'Tapped In', its framework to increase customer participation in the delivery of water services. It sets out the participation scale to differentiate between different levels of engagement and involvement:

Listening and understanding → **Listening and acting** → **Engaging and acting** → **Customer participation**

The PR19 process provided an opportunity to increase participation, particularly in relation to the future, by bringing together a wide group of people. Through our engagement programme we facilitated discussions about what people think about when it comes to water, alongside gaining a deeper understanding of issues, particularly from those who are well informed or with specific expertise. We included activity to co-imagine the future, including workshops with future customers and a specific co-creation workshop with customers to help us enhance our service delivery.

We identified opportunities to engage the local community to achieve a shared goal and work in a more collaborative way. This is evident from our work with Caterham Foodbank, which has encouraged a local community group to play a greater role in delivering our service.

Active participation – working with local foodbanks

Affordability Innovation

To help us engage with hard to reach groups and better understand the different causes of vulnerability, how it affects people and how we can help them more, we joined up with Caterham Foodbank as part of our second phase of research. This allowed us to talk directly to our customers and gather insight from those that support them in the community. We extended our engagement to other foodbanks across our area and will be working with them to help increase awareness about the support we offer, identify people who would benefit from it and empower people to ask for help when they need it.

We talked to customers about their experiences of dealing with us and discussed what changes could encourage them to become more active participants. Using different technology, providing customers with more options and engaging with them in a more tailored way were all discussed, and our future plans will reflect their needs and demonstrate how we will evolve our approach in this area. At our future customer workshop, for example, we asked them to design the customer journey of the future.

We stayed in touch with research participants to include them in further activity so they were able to provide more informed inputs. We invited everyone to join our online community so they could see how their contribution shaped the process and what we had done with their views.

Active participation – designing services of the future

Affordability Innovation

To ensure our social tariff meets the needs of those facing financial hardship, we held a ‘design sprint’ with subject matter experts and shared the results with community representatives. The design sprint concept is intended to reduce the risks of launching a new product or service by answering key questions, validating assumptions and testing ideas. This activity worked well for us and we know that our co-creative approach means the changes we have made as a result will better meet the needs of those it is intended to help.

Objective 4 - Demonstrate how engagement has shaped the business plan

Having carried out a high quality engagement programme, we used the findings to shape our plan, both in terms of the outcomes we will deliver and the way we deliver them. Throughout our plan we show the links between the engagement, the outcomes and what we will do to deliver on our pledges from 2020 to 2025.

This has been an iterative process and we have shared our thinking with the CSP as the outputs of each piece of research are concluded. We demonstrated how we built on the outcomes of each phase to inform the next to ensure it is customer-led and focused on the things that matter most.

In conjunction with our research partners we used appropriate triangulation to consider different sources of insight to check alignment and identify conflicts. Where conflicts did emerge, we used further research to address this and ultimately explain the trade-offs made in the Business Plan. More information about our triangulation approach is on page 22.

The third phase tested whether customers supported our Business Plan, i.e. they can clearly recognise their priorities, support the level of service being planned for (including any investment) and the cost of that plan.

Throughout the chapters of our plan we will show how customer insight has influenced our decision making and how our activity will address our customer priorities.

Assurance and governance

The bespoke research was carried out in partnership with specialist accredited market research providers, who went through a rigorous tender process, to ensure we used appropriate and valid techniques.

We also drew on economic expertise to review the willingness to pay survey and to build a model that allows us to combine the information coming out of the survey with other sources.

Our draft Business Plan consultation document underwent full independent assurance. The customer engagement programme outcomes are all available in Appendices A1.1 – A1.6.

Our dedicated monthly PR19 Steering Group, led by our managing director, included ongoing consideration of the customer insight through the various methods to ensure it led the development of the business plan.

The CSP's role was to provide independent scrutiny of our customer engagement activity throughout the process and challenge our approach so we could address any areas of concern or potential shortfalls in a timely manner. The CSP's assessment of the quality of our engagement programme and the extent to which it informs the business plan was made by considering how the Company has performed against Ofwat's key questions. Our final response to the feedback from the CSP, provided to them on 20 August, is available in Appendix A1.7 – Our response to the CSP's draft report.

Regular interaction with the CSP through formal and informal meetings supported the process, alongside regular sharing of information and tracking of progress through a challenge log. In addition, individual CSP members were given responsibility for an Ofwat theme on which to focus their attention and assure the rest of the group that appropriate activity had been carried out. The CSP were invited to be involved at all stages from inputting into the research briefs to observing activities.

Board members have also each been allocated responsibility for a theme running through the plan so there is a clear link between the Company, CSP and Board throughout the process to ensure that the plan reflects customers' views and there is clear ownership at Board level.

Independent non-executive directors and our chairman attended a number of CSP meetings throughout the process, as well as our executive directors being at every one. The CSP members had the opportunity to discuss the customer engagement process with the relevant Board member, as well as dedicated private sessions with the independent non-executive directors and chairman.

Jon Woods, independent non-executive director and general manager of Coca-Cola UK, Ireland and Northern Europe, oversaw our engagement programme, lending his considerable expertise on research techniques, customer-friendly language and communication channels.

Beyond the price review

It is important that the customer engagement activity we carry out for the price review does not stop once the plan has been completed, and our strategy is to continue to use customer insight to improve the services we provide and respond to customers' needs. To do this effectively we will:

- Continue the 'Talk on Water' programme to engage with our customers and stakeholders and feed this in to decision making
- Identify additional sources of customer insight that we can collect on a regular basis and feed back into the business
- Test what we hear with our online customer community and through more regular forums with customers and stakeholders
- Continue to have dialogue around long-term issues to ensure our strategy remains relevant and responsive to future challenges and opportunities
- Actively progress schemes and activities that enhance customer participation in our service and learn from these, so it becomes embedded across our business
- Reduce the amount of bespoke research required at the next price review so it supplements the enhanced business as usual process, rather than bespoke research being the prime driver of the PR24 engagement programme
- Nurture the relationships we make through community outreach with vulnerable groups through our community engagement programme which includes charitable donations and our 'Give a Day' scheme.

Engagement methods and techniques

This section sets out the methods and techniques we have used to gather insight from our customers and other stakeholders. It covers each phase of the bespoke customer research programme, insight from business as usual activity, and the activity across a range of communication channels. It also touches on the process of triangulation and how we used these insights to develop our Business Plan.

To see our research programme at a glance visit page 2.

Bespoke research programme

Our customer research programme was split into three phases. At the end of each phase we reviewed what we had learned and used the findings to guide the development and focus of the next phase, so the research was customer-led and focused on their needs and priorities.

Phase one: listen, learn and inform

Aim: To explore baseline customer perceptions and uncover customers' priorities regarding water and the service they receive both now and in the future.

Research type: Qualitative

Research methods:

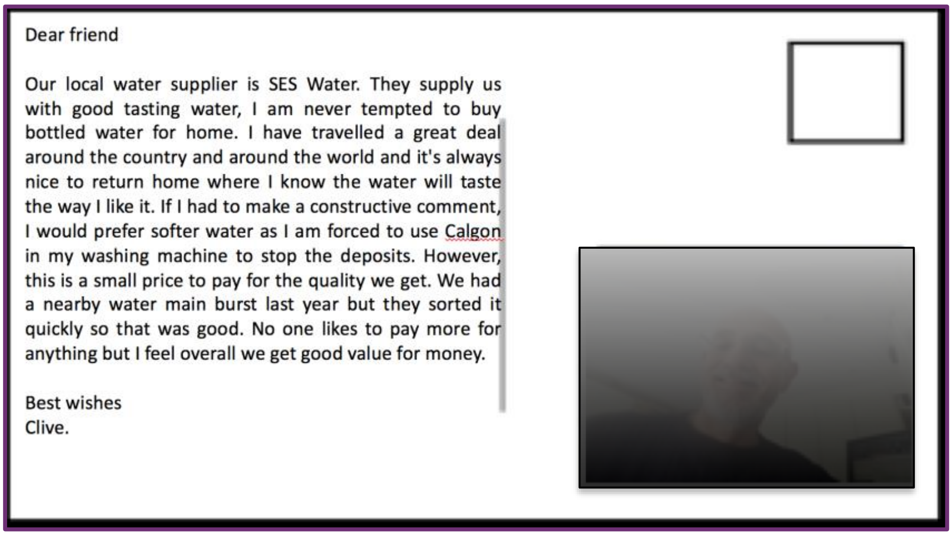
- Workshops
- Interviews

Participants: Workshops involved household customers including a mix of ages, gender, location and socio-economic groups, business customers included a mix of higher and lower water dependency and future customers not yet paying a water bill. In-home interviews with vulnerable customers.

What we did:

Ahead of the workshops, participants carried out a number of pre-tasks designed to get them thinking about water and identify spontaneous priorities. The tasks were recorded on a smartphone app provided by specialists Crowdlab. They were asked to:

- Write a postcard to a friend about SES Water to capture spontaneous perceptions of the Company

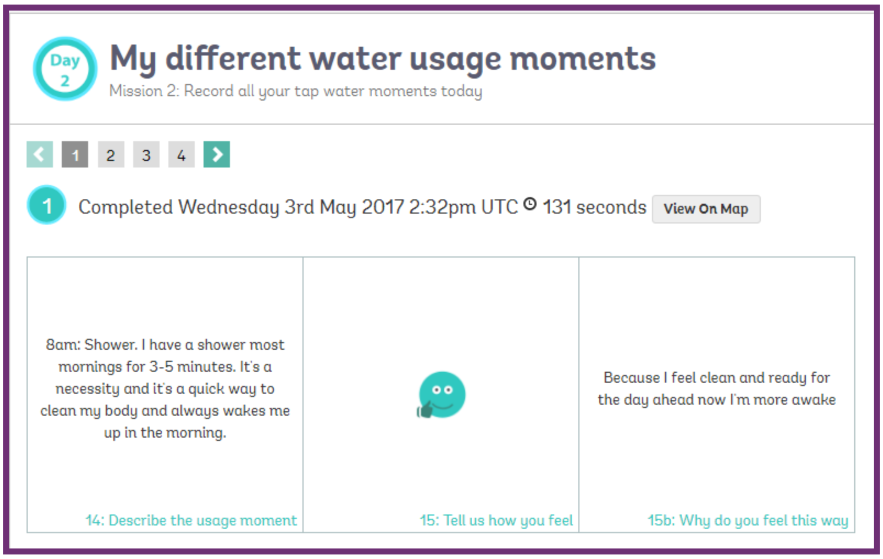


Dear friend

Our local water supplier is SES Water. They supply us with good tasting water, I am never tempted to buy bottled water for home. I have travelled a great deal around the country and around the world and it's always nice to return home where I know the water will taste the way I like it. If I had to make a constructive comment, I would prefer softer water as I am forced to use Calgon in my washing machine to stop the deposits. However, this is a small price to pay for the quality we get. We had a nearby water main burst last year but they sorted it quickly so that was good. No one likes to pay more for anything but I feel overall we get good value for money.

Best wishes
Clive.

- Record a 'water moments' diary-for-a-day, describing every time they used water and how it made them feel



- A water deprivation exercise to see how they would feel if water wasn't available to carry out all their water moments
- A video selfie on how they would feel without water
- Find their latest water bill so they would be able to discuss cost and other customer service information.

The workshop and in-home interviews then explored their responses in more detail to help uncover different attitudes towards water, views on the service they receive and used current performance information to help identify priority areas for improvement.

Our approach to vulnerable customers in phase one

We tailored our approach by carrying out in-home interviews with seven vulnerable customers in a range of circumstances. This included elderly customers, high water needs, customers with disabilities and customers experiencing financial hardship.

They were still asked to carry out the pre-tasks, but responses and priorities were explored through one-to-one conversations in their own environment to put them at ease and gather high-quality insight.

Phase two: test and review

Aim: To take the results of phase one and insight from business as usual activity and explore customers' priorities in more depth.

- Provide quantitative insight into customers' willingness to pay for different service offerings
- Test acceptability of the quantitative customer findings with other stakeholders
- Quantify and determine customers' interest in participating in the supply of their water in the future, and also include opportunities for them to co-create solutions to challenges and develop innovative services
- Further test and explore some key findings from phase one, such as the importance of SES Water as a local company
- Triangulate what we already knew from within the business with bespoke research findings
- Find ways for bespoke research activity to be continued into the rest of the programme and the Company's ongoing engagement processes.

Research type: Qualitative and quantitative

Research methods:

- Co-creation workshop
- Future customers event
- Discussions at community support groups

- Willingness to pay research
- In-depth expert stakeholder interviews

Participants: Households, businesses, future customers, customers in vulnerable circumstances and stakeholders.

What we did:

Co-creation workshop

Research firm Explain Market Research ran a qualitative, co-creation workshop with household customers. It involved:

- 22 customers, split across three tables including respondents from each of the three water attitude profiles identified in phase one – water conscious, cost conscious and water blind; and a mix of gender, age and socio-economic status
- An initial prioritisation exercise at the start, which was repeated at the end of the workshop
- Specific sessions held on resilience, dry winters, metering, customer journeys and supply pipe ownership.

Future customer event

Research firm Explain Market Research ran a qualitative event with local students who are not currently water bill payers but may be in the future. It involved:

- 19 students aged 16 and 17 from East Surrey College
- A tour of the Bough Beech reservoir, treatment works and education centre with a SES Water education tutor
- An interactive workshop with joint discussions and activities as a room and break-out discussions across two tables focused on the local area, the environment, dry winters, education, customer journeys of the future and Q&A.

Community support groups

Research firm Explain Market Research attended a community group run for elderly customers (Purley and Coulsdon Clubs for the Elderly (PaCE)) and Caterham Foodbank. Due to the vulnerable nature of attendees at these sessions the format was agreed in advance with the organisers and involved:

- Informal discussions with a group of elderly service users with a PaCE representative present
- Approaches to individual service users at Caterham Foodbank, supported by foodbank volunteers with anecdotal feedback received from volunteers and representatives present.

Willingness to pay (WTP) research

Research firm Boxclever was commissioned to carry out the WTP research. The research involved:

- A combination of online and face-to-face Computer Assisted Personal Interview (CAPI) completions of surveys
- 1,002 household customer surveys completed, using a representative sample of gender, age, location in our supply area, social grade and whether they had a meter or not
- 100 business customer surveys completed
- Use of engaging educational material to warm customers up prior to the choice-based exercise including a game allowing customers to 'build your own ideal water service'
- The use of Choice-Based Conjoint analysis to quantify the value customers attach to changes in level of service. This is a stated preference method that asks customers to trade-off different water service scenarios and by observing the choices made the trade-offs they are making can be quantified
- Using the results from the Choice-Based Conjoint analysis to create a market simulation analysis tool that allows us to input changes in service levels and test sensitivities on customers' willingness to accept the overall bill impact
- Use of the Gabor Granger technique to quantify the proportion of our customers who would accept a range of overall bill increases
- Consumer preferences were tested across seven service attributes:
    - Rate of pipe replacement
    - Leakage
    - Supply interruptions
    - Properties protected from a risk of supply failure
    - Education and water efficiency advice
    - Metering
    - Local service provider (household consumers only).
- Within most attributes we tested four levels – a reduction in current service, the current service level, an improvement on the current service level and a bigger improvement on the current service level

Innovation in willingness to pay research

We specifically chose to work with quantitative research specialists Boxclever due to their experience in pioneering new WTP approaches, especially in different industries. At PR14, most water companies, including us, used a stated preference technique called Conjoint Value Analysis which only presented each respondent with a single scenario at a time. This time, Boxclever's skilled analytics team implemented more innovative and engaging pricing methodologies to fully quantify customers' preferences, including Choice-Based Conjoint Analysis which gives multiple scenarios and therefore more robust results.

In-depth expert stakeholder interviews

Research firm Boxclever was used to carry out in-depth interviews with stakeholders to understand their more 'expert' views on our role and challenges and how we address them and to get their insight on the results of the willingness to pay research. This involved:

- One to one interviews with 13 stakeholders including environmental organisations (Natural England, WWF, South East Rivers Trust), community support organisations/charities (East Surrey Carers, Age UK Surrey, Community Debt Advice), community representatives (local MP, local council, parish councillor), the main water retailer in our supply area, trade associations (National Farmers Union, Homebuilders Federation) and a housing association
- Respondents were asked to read 'Looking Forward', the Company's long-term vision and a high-level summary of the results of the willingness to pay research in advance of the interview.

Phase three: seeing the full picture

Aim: To test overall acceptability of our draft Business Plan and bill impact and gather specific customer insight on the social tariff and views on the value attached to us being a small company.

Research type: Quantitative (acceptability) and qualitative

Research methods:

- Workshops on social tariff and vulnerable customer support
- Social tariff design sprint and in-depth interviews with experts in vulnerability
- Face-to-face interviews on willingness to accept paying a small company premium
- Mixture of online and face-to-face interviews for acceptability testing.

Participants: Households (including mix of ages, socio-economic groups and vulnerabilities), businesses and vulnerable support organisations.

What we did:

Vulnerable customer support research

- Research firm Explain Market Research ran two customer workshops involving 63 customers
- The research explored customers views on the role of a water company in helping customers in vulnerable circumstances and explored options for enhancing the support offered
- The research tested acceptability for the bill supplement to support the social tariff, testing opinion on whether there should be an absolute or a percentage supplement and what the supplement should be. Attendees voted individually on their smartphones at the start and end of the sessions with the results shown on screen.

Social tariff design sprint

- Explain Market Research ran a dedicated session involving two expert community representatives to help the company co-create the future approach to delivering the social tariff
- They then tested the proposed re-designed social tariff through five in-depth telephone interviews with local representatives who provide support to vulnerable

customers e.g. Age Concern and Stepchange. To further evaluate the outcomes, one-to-one discussions were conducted with service users and volunteers at Caterham Foodbank.

Research into the willingness to accept a small company premium

- Explain Market Research carried out face-to-face interviews with 100 household customers, in two locations, in a hall test environment to test levels of support for the small company premium
- Participants watched an animation which gave an overview of the Company and highlighted the advantages and disadvantages of being served by a small company, after which they completed a survey which asked if customers were willing to accept paying a little extra to be served by a smaller local company.

Acceptability testing

- Research firm Boxclever developed an online, gamified survey that allowed customers to understand what would be delivered through the plan and see the impact it would have on their bill
- A combination of online and face-to-face Computer Assisted Personal Interview (CAPI) completions of surveys
- 847 household customers and 105 business customers completed the survey.

They had the opportunity to change the level of service for leakage and per capita consumption as these were the areas where we did not yet feel we had a clear mandate from customers. Similarly, household customers were also asked to choose between a number of different options for supporting those in financial hardship.

Insight from business as usual activity

We identified a range of data that we already collect to help us understand customers' needs and priorities. The raw data was processed and analysed alongside the findings of the customer research and we also drew on knowledge held across the business through colleagues' ongoing interactions with customers and other stakeholders. The following is a sample of the sources of business as usual data:

- Complaints root cause analysis
- Quarterly domestic customer tracker survey
- Ofwat Service Incentive Mechanism (SIM) surveys
- Our own 'shadow' SIM data
- Customer feedback through our billing system
- Supply chain partner's research.

Communications channels

Our engagement programme was supported by an integrated communications campaign across a range of channels. We developed the 'Talk on Water' brand to increase visibility and engage customers and stakeholders so they can recognise their contribution to our plans. We also used it to promote and encourage responses to our public consultations. The channels we used and activity we carried out included:

- Media and social media channels including call to action to get involved
- Digital content including copy, films and GIFs to make content engaging and accessible
- Stakeholder engagement through one-to-one briefings, events and workshops
- Attendance at community events and community talks
- Online community forum to discuss key issues and capture feedback.
- Consultation on our draft Business Plan
- Consultation on our draft Water Resources Management Plan

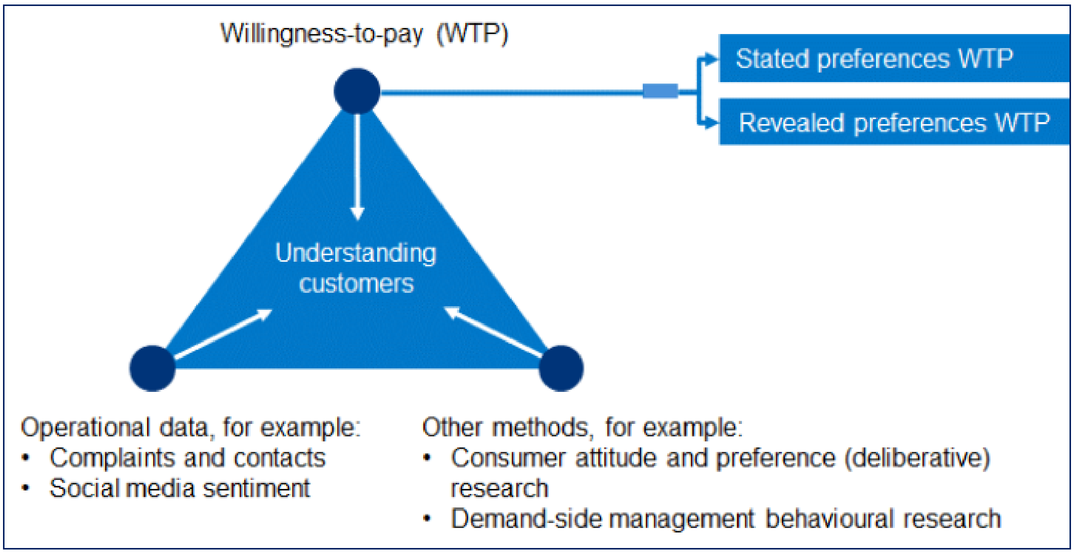
A brand-new channel for dedicated online conversations

Since it launched in December 2017, over 300 people have joined our 'Talk on Water' online community and contributed to polls and discussions about key aspects of our service. It is enabling us to hold regular, two-way conversations with our customers, engage them about key issues and test out ideas, as well as informing them about what we do. We plan to continue using it and investing in more functionality to help us develop our plans and use it as an important digital communication channel.

Triangulation approach

Triangulation is the process of assimilating key insights from all relevant and available data and information sources. This means taking what we know and what we are continuing to learn about our customers' and other stakeholders' expectations and using this wealth of information, alongside our own business knowledge and expertise to reach our decisions.

We took an iterative approach by interrogating what we learnt to help us develop our plans and identify any knowledge gaps. We shared the information we used, and the decisions made as a result of this information, with the CSP on a regular basis.



There is more information about how we triangulated evidence about the key customer themes that emerged from the engagement in Appendix A2.2 – Evidence and triangulation.

Customer insight – priorities and preferences

Our engagement programme enabled us to understand what matters most to customers. You can view our insight journey and how it has helped shape our plan on page 4.

Phase one research

The first phase was about gathering views on customers' priorities and the longer term. In this phase we learnt the following.

1. Customer segments starting to emerge

   Cost conscious customers are more likely to be metered, aware of what they are using and are already using water saving strategies such as half-filling the kettle.

   Water conscious customers are not necessarily metered but are thoughtful about their water usage as they are environmentally aware and dislike waste.

   Water blind customers are unaware of what they are using and because they can afford their bill and are satisfied with service, they never think about water unless there is a problem.

2. Priorities are consistent across the different customer segments

   The water moments diary helped to uncover the emotional value of water, in addition to the more obvious functional uses. The deprivation exercise challenged all customers' 'take it for granted' approach, regardless of their previous attitude and behaviour, which meant their priorities were very clear.

   'Brilliant basics' – the Company should be providing these things now and, in the future, too:

   - Local customer service centre
   - Looking after the environment
   - Investing in infrastructure and maintaining pipes to minimise leaks
   - Fair tariffs
   - A resilient supply
   - High quality water.

   It was felt that the Company is doing a good job in these areas already, but leakage could be improved.

   'Blow me away' – initiatives that would 'surprise and delight' customers if they were provided now:

   - Smart meters
   - Softening advice and devices (most customers were unaware that we soften water, they just accepted that the south east is a hard water region)
   - A smartphone app
   - Education visits and materials
   - Free efficiency devices and advice.

Some of these are already being delivered but awareness was low of both the education programme and the efficiency support available.

3. Being a local company is very important

   The majority of customers had no experience of contacting us, but this was seen as a positive thing, especially compared to other utility companies. Those that had been in touch were generally very happy with the service received. Particular points of praise were the local phone number and being able to, 'speak to a human without being transferred from pillar to post.' In summary, in a very busy and 'global' world, having a reliable and local service provider with a social conscience is welcomed.

4. Minority of negative experiences

   Of the few instances discussed, negative product experiences were about water quality and chalky water. Service-related issues included time taken to respond and confusion over temporary reinstatement of roads and pathways.

5. Current leakage levels feel unacceptable even if targets are being met

   Leakage was expected to be an emotive topic and it did generate debate, which in part was due to a lack of understanding of a complex subject. Participants found it impossible to imagine that much water being wasted and it created resentment about customer usage behaviour messaging. It is our responsibility to work with the rest of the industry to address this.

6. Some 'blow me away' initiatives would be welcome

   As well as the things that would 'surprise and delight' if we did them now, long-term priorities tend to focus on innovation around water supply and demand. Ideas discussed included water sharing, new ways of sourcing, recycling water and reward tariffs based on reduced consumption. Sustainability was important with customers accepting that they need to do their part as well.

7. Technology is critical for future customers and they have a social conscience

   Young people are 'present tense' and demanding of service providers and we are no exception. Comparisons to big brands showed that a modern and fresh approach to business is expected with the customer at the centre of everything. Future customers expect us to offer technology that enables quick response times through a channel of their choosing. This group also expects us to have a corporate social responsibility programme and they are more environmentally engaged than the general population.

   Smart meters are important in the context of 'smart homes' and although not all customers wanted one, if smart meters are not offered in the future, we would be seen to be falling behind other utility providers.

8. Education programme is vital but not widely heard of

   All customers saw education as a valuable offering for the community and focusing on future generations is important. Supporting schools demonstrates commitment to the supply area, more so than giving money to local charities which was polarising.

Outcome: ‘Looking Forward’, our long-term vision

Our reflections on what we learnt have formed the basis of our strategic direction which is explained for customers in our Long-Term Vision. The customer-friendly document was sent to key stakeholders for comment and to customers involved in the first phase of the research to establish whether it reflected their priorities. It was also used as pre-reading for some aspects of our phase two research. The document can be found on our website.

Phase two research

The phase two research was split into three sections: qualitative research findings (co-creation workshop, future customer event and community-based activity); quantitative research findings; and expert stakeholder insight.

Qualitative research findings:

1. Water quality and reliability of supply remain customers’ highest priorities

   Supplying water that meets quality standards, is reliable and is acceptable in terms of its taste and smell are consistently customers’ highest priorities. Customers were least willing to accept sudden interruptions to service of 4 days or more and water quality scenarios including a ‘do not use’ notice, a boil notice or water with an unpleasant taste, smell or appearance, even if told it is safe to drink. They raised issues including health concerns, inconvenience to daily life and lack of ability to prepare.

2. Customer service was the lowest priority

   Customer service came out as the lowest priority overall, with respondents showing an indifferent attitude towards the service – the majority of respondents had no previous customer service experience with us and no prior issues with their water supply. There was an agreement that if the water supply was reliable and of an acceptable standard then this limited the need to contact us.

3. There was limited knowledge and understanding of the impact of dry winters but a combination of investment in infrastructure and customer behaviour change were highlighted as ways to address them

   Customers showed little awareness of the impact of dry winters on water supplies. When discussed in more detail they considered it important that we maintain and invest in current infrastructure, particularly to reduce leaks, and invest in new technologies to increase water supplies and storage. However, they also recognised that they had a role to play in reducing demand and believe we should play a prominent role in changing customer attitudes and behaviour. They believe communicating via multiple channels including on the local news and via social media is important and all believe education across future and current customers is vital.

4. Metering is generally accepted but some believe there should continue to be choice

   Overall customers were accepting of the prospect of having a water meter and recognise it as a measure to reduce demand and increase resilience of supplies. The majority of customers were supportive of us supplying meters, however some, particularly those that are cost conscious, held negative opinions about it being compulsory and believe customers should have a choice. Customers felt that smart metering could encourage people to take up meters and highlighted the benefits of understanding how much water is being used and finding leaks earlier. Making the process easy for customers, providing incentives and using metering as an opportunity to educate people about the impact of dry winters were all mentioned to help support metering acceptance.

5. Educating customers is vital and there is an appetite for greater provision

   All respondents felt that educating customers was vital to change attitudes and increase water efficiency. There were mixed opinions about whether the focus should be on current or future customers. Knowledge of our current education programme was limited, particularly amongst water blind respondents. The future customers who attended Bough Beech education centre were positive about the experience but suggested making it more interactive to keep their age group engaged. They felt that extending the programme to colleges would be beneficial and potentially more effective and they were supportive of us building a second education centre so more people can attend events.

6. Customers want an easy and responsive customer journey

   When asked to redesign a customer journey related to a water quality issue, customers expect multiple contact channels (telephone, online, text), a quick response and ongoing communication about the issue. A clear and reassuring response at the initial contact was important and if it cannot be solved immediately, quick action to address the problem was expected. Customers expect to be able to opt-in for updates about the status of the issue and to receive practical information such as when an engineer will attend. Some customers were willing to try to install a check valve but most, particularly the elderly, thought that it would be extremely difficult to install. Respondents across all groups expected an update when the issue was resolved with many wanting an explanation of what had happened, why and any future action required.

7. There were mixed views on providing additional services for vulnerable customers when there is an issue

   Some respondents felt that vulnerable customers should receive an enhanced service, such as prioritised response and/or provision of water during a service fault while others felt that it was not necessary as all customers should be treated the same. Elderly customers at the PaCE group did not automatically identify themselves as being vulnerable and didn't highlight having issues paying their bill but would be willing to contact us if they had financial concerns. Caterham Foodbank respondents were all on some sort of payment plan with us, most of whom had found out about it via a third party. They all described a positive experience setting it up and the benefits of working with third parties was highlighted.

Quantitative research findings:

The household WTP research showed encouraging levels of customer support, with the majority willing to accept some level of bill increase to support service improvements.

1. Bill change is the single most influential factor in driving decision making but other elements accounted for 63% of the choices made

   The most influential factors, after change in the bill, were metering, being a local service provider and education and water efficiency advice. The importance of these three is driven as much by an expected bill reduction for any anticipated service reduction as it is a willingness to pay for service improvements.

2. Nearly one in five respondents would be classed as financially vulnerable and this has an impact on their reaction to bill increases

   Customers were asked to rank their ability to afford their bill from "I can always afford…" to "I always struggle…" and nearly one in five indicated that they had, at least at times struggled to afford their bill. Financially vulnerable customers were less accepting of bill increases with 75% of customers prepared to accept a 1% increase in comparison to 86% of other respondents. There is a sharper decline in acceptance of bill increases above 3% for those that are financially vulnerable.

3. Customers would expect to be compensated for a reduction in service on all service attributes tested and the bill reductions required are often greater than the bill increases that would be acceptable for improvements in service

   Customers would expect the largest bill reductions for stopping the metering programme and moving the customer contact centre.

4. Customers are prepared to pay more for an enhanced service on the majority of the service attributes tested, but there is a limit to what they are willing to pay for

   The largest willingness to pay for service improvements related to the two service attributes related to disruption to supply – protecting homes from risk of supply failure and shorter-term supply interruptions. Protecting all homes from the risk of supply failure is the service attribute tested that customers would be most willing to accept a bill increase to see us provide (2.4% increase).

   Customers are willing to pay for leakage reductions and to reduce the length of supply interruptions but there is greater willingness to pay (on a per unit of improvement basis) for the first level of improvements proposed rather than the top level of improvement proposed.

5. Education and provision of water efficiency advice was the most polarising service attribute tested

   Customers do not support us reducing the investment we make in education and provision of water efficiency advice. But, they also don't show a willingness to pay for further investment at the levels tested. Close to two-fifths of customers showed a preference for maintaining the current level of investment with one-fifth preferring a reduction and over two-fifths preferring an increase in investment.

The business customer WTP insight generally mirrored the household customer WTP.

6. Bill change is the single most influential factor in driving decision making but other elements accounted for 66% of the choices made

   The attributes were listed in the same order of importance as the household customer research.

7. Customers would expect to be compensated for a reduction in service on all service attributes tested and the bill reductions required are greater than the bill increases that would be acceptable for improvements in service

   Business customers expect even greater bill reduction than household customers if service levels are to fall and in all cases the reduction expected is higher than the amount they are willing to pay for improvements. The one exception is water efficiency and education where views are polarising as in the household research.

8. Customers are prepared to pay more for an enhanced service on the majority of the service attributes tested, but there is a limit to what they are willing to pay for

   The largest willingness to pay for service improvements are to protect properties against the risk of supply failure (3.2%), increased levels of metering (2.8%) and reducing supply interruptions (1.8%). WTP for leakage reduction was lower (0.6%).

Expert stakeholder insight:

1. Stakeholders had mainly positive perceptions of SES Water but recognised challenges for the future

   They recognised the key challenges of rising population, increasing urbanisation, climate change and increasing numbers of customers in vulnerable circumstances. They also saw the lack of customer understanding about the need to be conscious about water as a key challenge.

2. They want SES Water to get more involved in partnership working and many believe they could be effective intermediaries

   They want the company to be more proactive about local issues and work more closely in partnership with them. They want us to be more open about our activity and believe our size should enable us to do more.

3. They expect us to go beyond regulatory obligations and foster a more ambitious environmental and community agenda

   They believe the company should be looking at the bigger picture and planning for the long term, not getting bogged down in the detail. They believe the environmental and corporate social responsibility activity we carry out should be more widely known about.

4. They were accepting that the key driver of willingness to pay was to protect against the risk of service failure and disruption

   They also see meters as a good solution for reducing demand but would like to see more communication on the environmental benefits of meters. They believe that there needs to be more focus on educating adults with a focus on meter promotion.

Outcome: draft Business Plan

We took the insight gathered through the bespoke research programme and triangulated it with the sources of business as usual insight. In addition, we considered the expectations of our regulators and other stakeholders. This resulted in ‘5 years, 5 pledges’, our draft Business Plan which we published for public consultation in May 2018. This set out our five customer pledges and details of the performance commitments that would support delivery of the pledges. The document was accompanied by a questionnaire to understand overall acceptability of the plan and the pledges. It also gave customers the opportunity to comment specifically on levels of service for usage reductions, leakage and support for those in financial hardship. The document can be found on the business plan page of our website.

Phase three research

Acceptability testing:

1. We saw high levels of acceptability with 76% accepting the draft Business Plan

   82% of respondents found the level of service improvements acceptable while 59% were accepting of the bill impact.

2. There was a preference for service levels beyond those in the draft Business Plan for leakage reduction and lower per capita consumption.

For both these areas around half (45% and 46% respectively) preferred the planned service improvements but the majority of the rest wanted to see the Business Plan go further.

3. Customers expressed lower acceptability levels for going further than the draft Business Plan for financial assistance.

   Around half (54%) preferred the planned service improvements whilst the remainder preferred the lower levels of support options.

Vulnerable customer and social tariff research:

1. Participants confirmed that awareness of our Helping Hand Scheme (services providing extra help, such as our Priority Services Register) was low, but all agreed that the support that was currently offered would be useful to a wide range of vulnerable customers.

   A key improvement identified was the need to promote this more widely both directly to customers and via third parties.

2. The majority of workshop attendees supported helping 25,000 people facing genuine financial hardship.

   The need to have strict eligibility criteria and regular checks was identified to ensure the support only goes to those in genuine need.

3. Some respondents disagreed in principle with customers subsidising the social tariff, but most felt the impact on bills was negligible.

   All agreed we should also be contributing to the scheme.

4. Following discussion, most supported a flat supplement on bills rather than the percentage supplement

   It was seen as fairer and less likely to penalise high water users.

Small company premium research:

1. A mean rating of 3.8 out of 5 (where 1 is not at all important and 5 is very important) was given to how important it was to be served by a small company.

   However, most customers (53%) were not aware their water is supplied by a small company.

2. Customers believe that the main benefits of being served by a small company are better customer service and more local knowledge.

   They also suggested it would provide quicker and easier communication and jobs for local people. Most customers could not think of a negative related to being served by a small company but those that did highlighted that it would be more expensive.

3. 82% of customers were willing to pay an additional amount to be served by a small company – a maximum of £4 was tested

   The key reasons customers gave for this was that it was seen as a small price to pay, they would receive a better service and the supplier was more in touch with local people.

Influence on our Business Plan

Our customers' priorities have directly influenced our plan. A summary of what they said and what we'll deliver is on page 5.

Key customer themes

The key customer themes that we have emerged through the customer engagement and we have discussed in more detail through the different phases of research are:

- Metering
- Leakage
- Supply interruptions
- Resilient network
- Mains replacement
- Water quality
- Education and water efficiency
- Customer service and local call centre
- Affordability and vulnerability

These are all areas customers have told us are priorities and we have used this to inform our activity and performance targets over the next five years. The details of the activity we will carry out can be found in the relevant chapter but a summary for each area is set out below.

Metering:

Customers' views on the environmental importance of reducing consumption vary but generally the importance is understood. They recognise the role that meters play in reducing consumption – although they do feel that installation of meters needs to be supported through provision of water efficiency services by the Company and that we protect those in financial difficulty. Customers have told us that smart meters would be a more attractive proposition and they are keen for us to use new technology to help them understand their consumption.

An increased rate of metering – that will effectively mean installing one at every viable property – is a core feature of our Water Resources Management Plan and received support through our public consultation. It is also a key recommendation of the National Infrastructure Commission to increase long-term resilience.

Our metering activity over the next five years will support our performance commitment to reduce per capita consumption (PCC). As a result of the third phase of research and customer support to drive water usage down further, we have set ourselves a more ambitious target to reduce PCC by 7.3% over the next five years. This will involve us fitting around 80,000 more meters and we will trial smart metering technology with a view to a full smart meter rollout for all replacement meters from 2025.

Leakage:

Customers believe we should be doing more to reduce leakage and they are more willing to reduce their own consumption if they believe we are doing our bit to drive leakage down. Our willingness to pay research showed that there was a limit to what customers felt we should invest to address leakage when considered alongside other service areas.

Our leakage reduction activity over the next five years will be measured through a leakage performance commitment. In our third phase of research we presented a 12% leakage reduction as our preferred plan with 15% tested as an alternative service level. Customers indicated that they were supportive of us going further and as a result we will be targeting a 15% reduction in leakage over the next five years with a longer-term strategy to reduce it by at least 50% by 2045. This is also in-line with the recommendations of the National Infrastructure Commission.

Supply interruptions:

Supply interruptions remain a high priority for customers and is an area where we are already one of the top performing companies. Customers view shorter interruptions as more acceptable, which is in-line with Ofwat's common performance commitment that is focused on interruptions greater than three hours. We believe this is an area where we can deliver a frontier shift in performance that will bring real benefit to customers. This has become even more important in the wake of the freeze-thaw event in March 2018 and is a critical part of delivering a resilient service.

We will therefore be targeting a 25% reduction in the minutes lost per customer for supply interruptions greater than three hours and target an elimination of interruptions completely by 2035.

Resilient network:

Our plan recognises that network resilience is a top priority to customers and that they are willing to pay for improvements. We intend to build on our PR14 commitment and continue to deliver our programme to increase the resilience of our network. Our plan is designed to deliver on multiple levels, including resilience to drought, longer-term supply interruptions and in addressing water resource considerations both within our company area and in the wider region.

We have set ourselves a performance commitment that recognises the importance of this area to customers. It means reaching a position where 100% of properties can be supplied by more than one treatment works by 2025 thereby increasing their protection against potential supply failures.

Mains replacement:

Customers expect us to invest in our infrastructure to avoid the risk of short-term supply failures and increase long-term resilience. They are willing to pay for an increase in the rate of mains replacement to achieve this.

Our performance in this area will be measured primarily through a commitment to reduce mains bursts. It will also support the delivery of the leakage and supply interruptions targets, both of which are priorities for customers. Targeting the right mains to replace will see us use innovative condition assessment technology, which will allow us to assess our network without interfering with supplies and make sure we invest when and where it's needed most.

Water quality:

Water quality remains a top priority for customers and we plan to maintain our industry leading performance. Customers also tell us they expect their water to look, smell and taste great and this is seen as part of us supplying high quality water.

Our performance commitment is to target zero under the Drinking Water Inspectorate's new measure of water quality – the Compliance Risk Index. We will reduce bills, through a penalty, if we fall below a set level.

We are also setting a performance commitment to further reduce the number of contacts about taste, odour and appearance of water supplies to maintain our industry leading position.

Education and water efficiency:

Customers recognise the importance of reducing consumption and believe that we should help them do it, particularly if we are installing meters. They don't want to see us reduce activity in this area but there is not a clear appetite for us to fund additional activity. They do however think it's important that we focus our education activity on both future generations and existing customers.

Our performance in this area will be primarily measured through the delivery of our usage reduction target. We also intend to develop a second education centre in the middle of our supply area that will be delivered in partnership with others to keep costs down and allow us to deliver more diverse education and water efficiency activity, something that customers believe is important.

Customer service and a local call centre:

Customers tell us that the transactional elements of customer service are generally a lower priority and if we are doing things right then they shouldn't need to contact us at all. However, when they do, they want contact with us to be easy and responsive. They also want to be able to access us through different channels and have choice about this, with many expecting us to make better use of digital technology. Customers continue to value having a locally-based call centre and that is something we do not plan to change.

As well as the new customer satisfaction measure, C-MeX, we will measure our performance in this area by setting a target to increase first-time resolution of enquiries to reflect the importance of this to customers.

Affordability and vulnerability:

Our customers expect bills to be affordable and our plan will deliver a £13 decrease on the average bill before inflation. This will be supported by an ongoing focus on debt management and a target to keep debt levels below 0.8% of turnover.

What is critical is that customers feel they get value for money from us, so we have set a target over the next five years for less than 10% of our customers to believe that their bill is not good value for money.

Most customers believe that we should do more to help those struggling to pay and enable them to make regular payments by supporting them with our social tariff. In our plan we are pledging to support at least 19,000 customers over the next five years which is double the number currently on our Water Support Scheme.

Our customers also recognise that it’s not just customers who are financially vulnerable that need our support. There are others who may need help to access our service for other reasons such as age, mental health or bereavement. We plan to offer a wider range of support for these customers and will measure this by measuring how helpful customers find our Helping Hand Scheme.

CHAPTER 2

Our pledges, incentives and bills

Our promises to customers that deliver what matters most to them

In this chapter you will hear about

- How we are performing today.
- Our five pledges for the next five years which focus on what customers have told us is important.
- The impact of what we will do on what customers will pay.

Our pledges, incentives and bills

We operate under a regulatory framework which allows for the recovery of costs and a rate of return to compensate investors. Investors can only achieve the level of return set by Ofwat if the company delivers on the commitments it has made to customers.

Delivering for our customers has always been at the heart of how we have run our business and we welcomed the greater emphasis placed on this at the last price control review. We made a series of commitments to customers at the start of 2015/16, which reflected their priorities, delivery of which has driven the decision making and activity we have carried out during this period.

In developing this plan, we have carried out even more extensive engagement with customers and stakeholders which has resulted in us making five pledges, supported by 24 performance commitments that we'll deliver between 2020 and 2025. We've set stretching targets, the levels of which have been informed through conversations with customers, and in some areas will set new standards for the industry. A number of them are supported by financial incentives and/or penalties if we out or underperform – ensuring that we remain focused on delivering more of what matters most to our customers.

Our service today

The table below summarises our actual performance against our current performance commitments for the first and third years of this business plan period. It also provides our forecast of likely performance in the final year of this business plan period, 2019/20. Further information on our forecast performance for 2018/19 and 2019/20 can be found in Appendix A12.2 – Business plan data table commentary (see App5).

Exceeding / On target / Behind target	2015/16 performance	2017/18 performance	2019/20 forecast
Provide a reliable and sufficient supply of safe, high quality drinking water			
Supply interruptions over 3 hours (average mins lost per household)	6.3	3.2	2.8
Number of burst mains	212	214	219
Overall water quality	99.95%	99.98%	99.98%
Taste, odour and discolouration contacts	419	365	365
Water softening	On track	On track	Deliver programme
Security of supply index	100%	100%	100%
Offer good value for money and keep bills at a fair and reasonable level			
Proportion of customers who do not think their bill is good value for money	9%	9%	9%
Customers on our Water Support tariff	5,686	8,150	11,451
Bad debt as a % of turnover	0.75%	0.64%	0.64%
Increase the resilience of our network to drought, flood and equipment failure			
Water restrictions	None	None	None
Number of customers supplied by more than one treatment works	36%	36%	56%
Deliver consistently high levels of service			
Customer satisfaction with their water service	91.5%	92%	91%
Service Incentive Mechanism (SIM) score	80.8 points	78.7 points	86.1 points
Number of complaints (per 1,000 properties)	10	9.8	6.6
Reduce the impact on the environment while seeking to make a positive contribution to its quality			
Leakage (million litres/day)	24.2	24.2	24.0
Environmental education programme (no. of people)	13,314	9,551	10,000
Customer usage reductions through metering (litres per person per day)	161	159	157
Greenhouse gas emissions (kgCO2eq/Ml)	470	376	55
Pollution incidents	2	2	0
National Environment Programme projects	0	0	14

We set ourselves stretching performance commitments for the current five-year period. We have adapted the way we work, think innovatively about how we deliver and invest to achieve these commitments. In the majority of cases we are delivering what we set out to do, and in some areas exceeding expected performance.

We have a lot to be proud of, notably our industry leading low number of bursts mains and length of time for supply interruptions. However, one burst main this year resulted in a lengthy supply interruption to a number of customers which means that we expect to face a penalty for not meeting our target. These events are not common, thanks to the continued investment we make to maintain the health of our assets and we are forecasting to be back on track for the final year of the current period.

We are consistently one of the best performers in the industry on the number of contacts we receive from customers about the quality of their water but set ourselves a challenging target that we have fallen short of meeting. We also have a comparably low leakage level when compared to other water companies and have met our target in this area for the past 19 years. We have missed our challenging target on pollution incidents due to five minor (as classified by the Environment Agency) pollution incidents in the first three years of this period. We provide ongoing training to our staff to make sure that no pollution incidents are a result of human error but unfortunately some minor incidents are unavoidable. Last year both incidents were due to water from burst mains picking up silt before entering rivers.

We have increased the number of people receiving financial support over the last three years and there are now 4,000 more customers on our Water Support Scheme than the target we set ourselves for 2020. Fewer customers are now dissatisfied with the value for money of their bill and we have managed to keep bad debt at very low levels.

We do have some challenges though. These are mainly related to the customer service we provide. Ofwat's Service Incentive Mechanism (SIM) score places us in the bottom quartile of the national league table and we also receive more complaints than we know is acceptable. Essentially, customers are satisfied with their water but say there is more we need to do when they contact us. Work is underway to improve our position and we believe we are heading in the right direction – more than 90 per cent of customers tell us they are happy with what we do – but our performance figures do not yet reflect the commitment of our employees to provide a great service every time. We will continue to deliver the changes required to permanently improve and we welcome the new measure of customer satisfaction, C-MeX, being introduced from 2020. You can read more about our service improvement plan in the Retail Chapter.

There is more detailed information about how we have performed in our annual reports on our website. In 2017 and 2018 we produced customer-friendly online summaries of our annual performance, drawing out key sections such as delivery against performance commitments, including contributions from customers on the service they have received. Providing complex information in this more understandable and digestible format has helped us engage more meaningfully with our customers on our performance which has directly impacted our future pledges and performance commitments.

Our pledges for 2020 to 2025

Our engagement programme has provided a broad range of insight which has driven the pledges and performance commitments we are making for 2020 to 2025.

Water is an essential service, but not one people spontaneously think about very often. Through the insight we've gained from the engagement programme we have seen subtle movements in the priorities of our customers and others who are impacted by or involved in some way in the service we deliver. But the core expectation of our customers remains the same – delivery of high quality water all day, every day.

We have been enthused by the depth of the discussions we've had with people about their water supply. It may not always be front of mind but when you start a conversation about water, everyone has a lot to say. The emotions that were evoked when we asked customers to imagine being deprived of water from their taps for a day reinforces the important role we play as custodians of such an essential public service.

We have summarised the insight our customers and others have given us into five pledges:

They build on our existing aims, emphasise our customers' priorities and capture their expectations of our wider role in society. Delivering these pledges will continue to put our customers at the heart of how we run our business.

The series of commitments we have made for each pledge will challenge us to ensure we deliver the promised level of service to our customers and we will report each year on how we have performed. Some of them are 'common performance commitments' which means performance can be compared across all water companies. Many commitments have a financial penalty associated with them, which means we are penalised if we don't perform well enough and if this happens customers' bills will be reduced to reflect the penalty for poor performance each year. Conversely, if we outperform some of the commitments, we will benefit from additional income. The remainder of the 24 performance commitments are classed as 'reputational' and have no financial incentive attached but they still form a vital part of the incentive framework. We want to continue being transparent about how we are performing against these reputational commitments because we consider that they remain important measures of our success in delivering what matters to our customers.

Our performance commitments for 2020-25

We are making 24 performance commitments which each have an annual target to achieve for the years 2020 to 2025. The information below describes the level of commitment we are making for 2025. For our annual targets see Appendix A12.1 - Business plan data tables (see App1) and for a definition of each see Appendix A2.2 - Performance commitment definitions.

High quality water all day, every day
Customers have told us that the quality of their water is their number one priority and breaks in their supply – both during planned and emergency work on our pipes – are inconvenient.

That’s why we’re pledging to continue to provide water of the highest quality and reduce the risk of supplies being interrupted. For the first time we are also committing to maintain a high level of customer confidence in our ability to provide high quality water all day, every day.

	We will…	**This means that by 2025…**
Supply interruptions	Maintain our high upper quartile position and aim to have the fewest minutes lost per customer for interruptions longer than three hours	We will reduce to an average of 2.1 minutes lost per customer, per year
Mains bursts	Continue our strong performance in reducing the number of mains that burst	We will reduce to 57.8 bursts per 1,000km of water mains
Customer concerns about their water	Maintain our industry leading position of having the fewest contacts from customers about their water quality	We will receive no more than 0.5 contacts per 1,000 people about the taste, smell or appearance of their water
Water quality compliance	Continue to produce amongst the highest quality water in the industry	We will keep water quality at industry leading levels, as measured by the Drinking Water Inspectorate’s new Compliance Risk Index
Customer confidence	Maintain a high level of confidence in our ability to provide customers with a reliable supply of high quality water	Taking everything into account, 90% of our customers will be confident in us

Fair prices and help when you need it
Customers have told us that money worries or personal circumstances can make paying for their water harder, even just temporarily, so they would welcome some extra support.

That’s why we’re pledging to ensure bills are fair for everybody, regardless of their circumstances, and we will increase the help we offer to those that genuinely need it.

	We will…	**This means that by 2025…**
Supporting customers in financial hardship	Increase the number of people who financially benefit from our re-designed social tariff	19,000 eligible customers will be on our Water Support Scheme which provides a reduction on their bill
Vulnerable support scheme awareness	Increase the awareness of our Helping Hand Scheme and Priority Services Register with all customers	58% of our customers will be aware of the extra support we can offer to those that need it

	We will…	This means that by 2025…
Vulnerable support scheme helpfulness	Ensure that our Helping Hand Scheme and Priority Services Register is helpful to those that benefit from it and also those that know about it	80% of customers asked will feel that the extra services we offer are helpful
Deliver value for money	Be clear about how we invest money from bills to limit the number of people who feel that their water bill does not offer good value for money	No more than 10% of customers will be dissatisfied
Managing bad debt	Maintain our industry-leading low levels of money that is billed but not paid by customers	Bad debt will be no more than 0.8% of our total annual revenue
Void properties	Reduce the number of properties that are connected to our network but shown as vacant (void) so not billed	Void properties will account for no more than 2.2% of all properties in our supply area

A service that is fit now and for the future

Customers have told us that a resilient supply of water is very important and making sure water is used carefully and not wasted – particularly from leaking pipes – is a big deal. That's why we're pledging to continue investing in our pipes, treatment works and other assets and to reduce leakage to a more acceptable level.

	We will…	This means that by 2025…
Risk of severe restrictions in a drought	Ensure that no customer is impacted by a severe drought	Nobody we serve will be subjected to restrictions such as standpipes or water rationing during a one in 200-year drought
Risk of supply failures	Increase the connectivity of our infrastructure to ensure that every customer can be supplied by more than one source	100% of properties will be able to be supplied by more than one water treatment works
Unplanned outages at treatment works	Reduce the likelihood of unplanned outages at our treatment works	An unplanned outage will only amount to 2.3% of our total peak week production capacity

	We will…	This means that by 2025…
Leakage	Further reduce our already comparatively low level of leakage	We will reduce the amount of water that is lost each day by a further 15% from 24 Ml/day in 2019/20

Excellent service, whenever and however you need it
Customers have told us that although they may not need to contact us very often, when they do, it needs to be an effortless experience that is tailored to them.

That's why we're pledging to improve the satisfaction of customers and developers and to strive for more customer queries to be answered first time, every time.

	We will…	This means that by 2025…
Customer satisfaction (C-MeX)	Improve our level of service so we have amongst the most satisfied customers in the country	We will be in the upper quartile in the industry league table
Developer satisfaction (D-MeX)	Meet developers needs on time and to a high quality	We will be in the upper quartile in the industry league table
First contact resolution	Reduce the number of times customers have to contact us about the same issue	85% of all customer contacts will be resolved first time

Supporting a thriving environment we can all rely upon
Customers value the environment and expect us to play a part in making it better, as well as prepare for future challenges like population growth and climate change.

That's why we're pledging to take less water from the environment by encouraging our customers to use less and reducing the impact of our essential operations by finding more sustainable ways of pumping, treating and distributing water. We're also committing to going further by supporting wildlife and improving rivers.

	We will…	This means that by 2025…
Usage (per capita consumption)	Help customers reduce how much water they use	We will reduce the average amount of water used by each person by 7.3% from 145 litres per day in 2019/20
Greenhouse gas emissions	Generate and use renewable energy to limit the greenhouse gases we create from our operations	We will invest in and purchase renewable energy to limit our emissions to 55kg of CO_2 per million litres of water put into supply

	We will…	This means that by 2025…
Pollution incidents	Strive to never cause severe pollution to land, air or water	We will not cause any category one or two pollution incidents (as measured by the Environment Agency)
Abstracting water to treat (Abstraction Incentive Mechanism)	Reduce the amount of water we abstract from more environmentally sensitive water sources when river flows are low	We will limit abstraction from two chalk boreholes to an average of 7 Ml/day and a peak of 12 Ml/day when groundwater is more than 43 metres below ground level
Improving land through biodiversity	Strive to make the land we own more attractive to a variety of plant and animal life	We will achieve and maintain The Wildlife Trusts' Biodiversity Benchmark at three of our treatment works
Improving rivers through delivery of WINEP	Deliver the requirements of the Environment Agency's Water Industry National Environment Programme (WINEP)	We will have delivered 24 river-based investigation or improvement programmes

Delivering what matters most to our customers and stakeholders

Ofwat has asked that all water companies have some common performance commitments:

- Supply interruptions
- Mains bursts
- Water quality compliance
- Risk of severe restrictions in a drought
- Unplanned outages at treatment works
- Leakage
- Customer satisfaction (C-MeX)
- Developer satisfaction (D-MeX)
- Usage (per capita consumption).

Ofwat's methodology also asks that all companies have performance commitments that address services to customers in vulnerable situations, resilience, asset health, void properties, the Abstraction Incentive Mechanism and the environment. These are all captured in the 24 commitments listed above.

Ofwat's proposed common performance commitments and areas to address are generally in-line with what our customers and other stakeholders have told us matters most. For example, customers see water quality compliance and supply interruptions as two of their top priorities. Where we have had a choice on service areas to target improved performance we have listened carefully to what our customers and others have told us.

Listening, triangulating and making decisions

In the Customer Engagement Chapter, we explain in detail our approach to engagement in the development of our Business Plan. To ensure that we built a plan that is achievable and acceptable to all, we have integrated key insights from our engagement activity with other relevant and available data sources. Our approach to this – triangulation – means taking what we know and what we are continuing to learn about our customers and other stakeholders' expectations and using this wealth of information, alongside our own business knowledge and expertise, to reach our decisions. We have not carried this out as a formulaic process and instead see our responsibility of producing a business plan as a sound judgement in each area, based on the range of evidence available.

We focused our triangulation activities on the key areas of our plan where customers' views can have the greatest impact, based on what we heard from customers in the first phase of engagement with them. Below is a short summary of the views we heard on these key areas. For fuller descriptions of how each phase of engagement and wider understanding of customers' views fed into our decision making see Appendix A2.1 – Evidence and triangulation.

Water quality:
Remains a top priority for customers and we will maintain our industry leading performance. This includes a target of zero under the Drinking Water Inspectorate's (DWI's) new measure of water quality – the Compliance Risk Index (CRI). We will also maintain our industry leading performance for the number of contacts we receive about the taste, smell and appearance of the water we supply.

Supply interruptions:
Continues to be a high priority for customers and we will keep our existing performance commitment related to minimising the length of supply interruptions that last more than three hours. The three-hour band has been set by Ofwat but appears to align with our customers' views that shorter interruptions are more acceptable.

Resilient supply:
Our plan recognises that network resilience is important to our customers and that they are willing to pay for improvements on the current level of service.

Mains replacement:
Our customers continue to value and endorse further investment to make sure our strong track record in performance on water quality, burst mains, leakage and interruptions is maintained for future generations through increased investment in mains replacement.

Leakage:
Customers support a significant leakage reduction by 2025. Willingness to pay research shows that customers support leakage reductions and are supportive of contributing to the additional cost of delivering.

Metering and usage:
Customers' views on the environmental importance of reducing consumption vary but generally the importance is understood. Customers accept that the best way to achieve reductions is through increased metering but do feel that installation of meters needs to be supported through provision of water efficiency services.

Water efficiency and education activities**:**
Customers have asked that our metering programme is supported with education on reducing consumption. Customers do not want to see a reduction in the activity we do in this area, but we must be mindful of their appetite to fund additional activity.

Customer service:
Customers value being served by a local company that is responsive to their needs and changing expectations. The majority of customers have no need to contact us and our everyday invisibility is therefore seen as a good thing.

Affordability:
Research shows that customers are supportive of funding the financial support that allows for discounts to be provided to those in financial hardship.

Vulnerability**:**
While we offer a range of services to customers in vulnerable situations the research has highlighted the lack of awareness of these services. Through our Business Plan engagement, we have made new partnerships and we will use these as a vehicle to share information and increase the reach of our services. We will also use what we have learnt to expand on the way we promote services offered and work with specialist organisations and the wastewater companies that also supply our customers.

We took this insight from customers and considered it alongside what we'd heard from stakeholders, including our regulators, and through our day-to-day customer contact. Together this led to us developing the performance commitments and targets which are included in our plan.

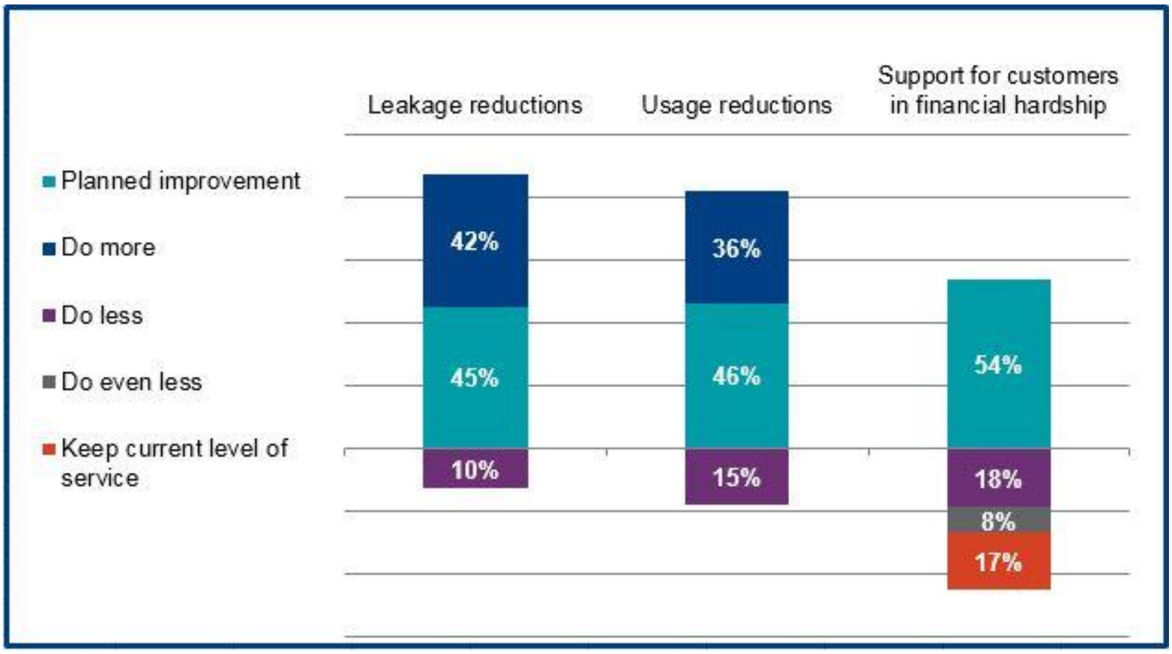
Draft business plan consultation and final outcome
In early May 2018 we published a draft Business Plan and tested this with customers through open consultation, targeted sharing with previously engaged customers and stakeholders and acceptability research carried out by an independent third-party market research agency.

We'd learnt a lot from the research and considered that the triangulation approach adopted so far had resulted in a draft Business Plan that appropriately reflected our customers' views. The research showed that 76% of household customers and 63% of business customers supported the draft Business Plan which we consider a strong indication of customer support for the targeted areas of service improvement and the consequential impact on the overall bill.

There were three areas where we considered that engagement up to that point had not given us the mandate to make a firm decision on the level of performance that would be supported by the majority of our customers. We therefore used the acceptability research as a final opportunity to test alternative options with our customers in these areas:

- Leakage reductions: the draft Business Plan proposed a 12% reduction by 2025 and we tested doing more and doing less
- Usage (per capita consumption) reductions: the draft Business Plan proposed a 6% reduction by 2025 and we tested doing more and doing less
- Level of support for customers in financial hardship: the draft Business Plan proposed supporting 25,000 customers in need of assistance by 2025 and we tested doing a little less, a lot less and, in effect, closing the existing scheme to new eligible customers.

Customers were asked to make a choice on the level of service they would prefer to experience in the context of the impact that this would have on their water bill. The chart below summarises the level of support for each option from household customers surveyed.



There was broad support for the draft Business Plan position from households, but a significant proportion of customers wanted to see more done to reduce both leakage and usage. The results for business customers showed a significantly stronger appetite to see more done in both areas. Support for customers in financial hardship was not tested with businesses as the level of service provided in this area does not impact on business customers' bills.

Taking these results, earlier insight gained from engagement, including the results of the willingness to pay research and broader stakeholder input, including the National Infrastructure Commission's report and the Government's 25-Year Environment Plan, led us to change our position in these three areas from what was proposed in the draft Business Plan.

Our final plan therefore targets the higher 'do more' option for both leakage and usage reductions. In recognition of the increase that doing more in these areas has on customers' bills we have taken the decision to 'do less' than was proposed in the draft Business Plan and include the cost of supporting 19,000 customers in financial hardship in the final plan. This has allowed us to off-set some of the bill increase driven by customers' choices on leakage and usage with a reduction from seeking a smaller bill increase to support customers in financial hardship.

We consider this is an appropriate trade-off that will maintain overall acceptability of the plan on the basis that:

- Committing to supporting 19,000 customers is a significant increase on the level of support currently offered, which is itself one of the leading, most extensive schemes offered by water companies
- We will continue, as we do currently, to offer support to all that need it regardless of the target set and any shortfall in funding will be provided by shareholders.

Delivering ambitious performance

We consider all our final performance commitment targets to be stretching and we know we will have to think smarter and innovate to meet them. We will also need to invest the income we receive from customers which is why it is so important that we have targeted delivering higher levels of performance in the areas that matter most to customers.

To make sure that we have set ourselves stretching targets we have used information about all water and wastewater company performance where it has been available. We have also looked beyond the sector for best practice performance where relevant. In Appendix A2.3 - Performance commitments: delivering ambitious performance, we provide evidence of how we reached each of our performance commitment targets and why each is stretching.

In the Retail and Wholesale Chapters there is more information about how we will deliver these performance commitments.

Outcome delivery incentives

The incentive framework is there to encourage companies to stretch themselves for the long-term benefit of their customers and all water customers across the country, as one company pushing the frontier of service delivery encourages all companies to do better.

We have a reputational incentive to deliver on all our performance commitment targets and we will report our performance to customers each year as well as continuing to engage with them on their priorities.

Many commitments also have a financial penalty associated with them, which means we are penalised if we don't perform well enough and if this happens, customers' bills will be reduced to reflect the penalty for poor performance each year. Conversely, if we outperform some of the commitments, we will benefit from additional income. The table below shows the performance commitments where there will be a penalty for underperformance or a payment for outperformance.

Pledge	Performance commitment	Delivery incentive
High quality water all day, every day	Supply interruptions	Underperformance penalty and outperformance payment
	Mains bursts	Underperformance penalty and outperformance payment
	Customer concerns about their water	Underperformance penalty
	Water quality compliance	Underperformance penalty
Fair prices and help when you need it	Void properties	Underperformance penalty and outperformance payment
A service that is fit now and for the future	Risk of supply failures	Underperformance penalty and outperformance payment
	Leakage	Underperformance penalty and outperformance payment
Excellent service, whenever and however you need it	First contact resolution	Underperformance penalty and outperformance payment
	Customer satisfaction (C-MeX)	Underperformance penalty and outperformance payment
	Developer satisfaction (D-MeX)	Underperformance penalty and outperformance payment
Support a thriving environment we can all rely upon	Usage (per capita consumption)	Underperformance penalty and outperformance payment

We have selected these performance commitments to have a financial incentive because, in general, they are the commitments that our customers have said they value the most. Appendix A12.2 – Business plan data table commentary (see App1), provides a more detailed explanation of our choice on the type of financial incentive to apply to each performance commitment.

If we under or outperform the impact of this will flow through into customer bills. We have chosen for this impact to happen 'in-period' meaning performance in one year will impact on bills two years later.

Incentive rates

Underperformance penalties and outperformance payments will be calculated annually using actual performance at an incentive rate set in advance.

Incentive rates take into account the incremental cost of delivering the service and customer willingness to pay (WTP). They have principally been set based on the following formulae provided in the Ofwat PR19 Methodology:

> *Underperformance penalty = incremental WTP - (incremental cost x outperformance sharing rate)*
>
> *Outperformance payment = incremental WTP x (1- outperformance sharing rate)*

For the performance commitment related to water quality compliance we have used a different approach. We know that water quality is of the highest importance to our customers. We have not asked them to try and place a value on this priority through willingness to pay research. We have therefore adopted a penalty only incentive rate that takes into account the incremental cost of treating water.

The table below summarises the incentive rates that will apply to the financial outcome delivery incentives.

Performance commitment	Underperformance penalty rate	Outperformance payment rate
Supply interruptions	-£259,887 per minute	£241,233 per minute
Mains bursts	-£26,524 per burst per 1,000km	£15,592 per burst per 1,000km
Customer concerns about their water	-£796,186 per contact per 1,000 people	-
Water quality compliance	-£381,672 per unit of CRI	-
Void properties	-£123,221 per 1% of properties	£123,221 per 1% of properties
Risk of supply failures	-£72,516 per 1% of properties	£39,231 per 1% of properties
Leakage	-£178,896 per 1% reduction	£172,233 per 1% reduction
First contact resolution	-£4,635 per 1% of contacts	£2,318 per 1% of contacts
Customer satisfaction (C-MeX)	To be decided by Ofwat*	To be decided by Ofwat*

Performance commitment	Underperformance penalty rate	Outperformance payment rate
Developer satisfaction (D-MeX)	To be decided by Ofwat*	To be decided by Ofwat*
Usage (per capita consumption)	-£222,549 per 1% reduction	£223,877 per 1% reduction

*The C-MeX and D-MeX underperformance penalty or outperformance payment will be decided by Ofwat on an annual basis based on our score relative to other water companies. The maximum penalty and maximum payment for C-MeX are -/+ 2.4% of annual residential retail revenue. The maximum penalty and maximum payment for D-MeX are 5% and 2.5% of annual developer services revenue respectively.

Incremental willingness to pay
Our primary source of WTP valuations used to set the incentive rates described above is the survey completed by our customers from October 2017 to January 2018. In total we surveyed 1,002 household and 100 business customers. The methodology and results from this survey can be found in Appendix A1.3 – Phase 2 quantitative research report. The survey used engaging educational material to inform customers prior to them being given a choice-based exercise used to construct the willingness to pay values. We used two different contexts to see if this impacted on customers' choices. One group was given no context and the other group was shown the choices in the context of our past performance over time. There were no significant differences in the choices made. We opted not to assess whether customers choices may have varied if we had shown them how our performance compared to other water companies. This was in order to keep what could be viewed as an already quite complex surveying approach, as simple as possible and because of prior research which showed that there was no significant impact[1]. In validating the outcomes through our consultation on our draft Business Plan and acceptability testing, customers were provided with information on our comparative performance.

The survey sought to engage in a way that provided meaningful descriptions to customers about the options they were being asked to evaluate. For example, we asked customers directly about their willingness to support the increased roll-out of meters. We have then used these results to derive a WTP for a 1% change in usage based on the usage reductions that will be driven by meter installations.

We have also relied upon other techniques in deriving valuations of the benefits of delivering service improvements:

- For the first contact resolution performance commitment we have evaluated the average earnings lost by our customers from having to make repeat contacts to us

- For the void properties performance commitment, we have assumed that the benefit accruing to all customers relates to the income that is received from finding and issuing a water bill to a property that was previously recorded as being empty and not using water

- For the customer concerns about their water performance commitment we have relied upon the incentive rates applied at PR14 to set a penalty only performance commitment.

The valuation of the marginal benefit to a household customer of service improvements, as measured by the techniques listed above, can be found in Appendix A12.1 – Business plan

[1] Frontier Economics, Keeping Up with the Joneses, December 2016

data tables (see App 1). This provides the household values only as required by the Ofwat guidance. We have used a weighted average of the household and business results to derive the values used to set the incentive rates above.

Incremental costs
These have been derived from our forecast cost in 2020 to 2025 of delivering each performance commitment. We have used judgement in allocating costs across delivery of performance commitments. For example, replacing mains has a benefit to bursts, supply interruptions, leakage and water quality.

The valuation of the marginal cost for household customers of service improvements can be found in Appendix A12.1 – Business plan data tables (see App1). This provides the household values only as required by the Ofwat guidance. We have used a total cost to all customers – household and business – where the performance commitments relate to the wholesale water service we provide.

Deadbands on incentive payments
Deadbands can be used to prevent outperformance payments or underperformance penalties applying unless actual performance goes beyond a defined threshold.

We have adopted a deadband on one performance commitment – water quality compliance. We currently have one of the lowest levels of water quality non-compliance in the industry. We intend to keep it that way. The deadband is set at the mid-point of known company performance against the Compliance Risk Index in its first two years of operation. There is still a significant incentive to maintain our industry leading performance but including a deadband limits the risk of financial penalty levels of service that are still high.

Caps and collars on incentive payments
Caps and collars can be used to limit the outperformance payments or underperformance penalties that will apply to each performance commitment. We have applied a cap on the magnitude of financial incentives on supply interruptions and water quality compliance.

Supply interruptions:
An outperformance payment for supply interruptions is naturally capped at around £730k a year as zero interruptions is the best performance attainable. We have included a cap on the underperformance penalty at around £810k a year. We consider it is in our customers' best interests to limit our financial exposure to extreme events leading to material failures of the target because:

- Our interruptions performance is one of the best and we are targeting year-on-year improvements. Our incentive rate is significantly higher than the current rate reflecting the inconvenience customers go through when their supply is interrupted. It will therefore be a challenge to meet the target but there is strong incentive to do so

- Because of the high incentive rate, if we did not limit our exposure to extreme events we would be materially financially impacted on a scale beyond what could conceivably be considered under management control and therefore appropriate to penalise financially

- We will continue to appropriately reimburse those customers directly affected by supply interruptions under the Guaranteed Standards Scheme and ex-gratia payments.

We therefore think it is in customers' best interests to set an incentive rate that is higher than currently applied but limit our financial exposure to extreme events.

Water quality compliance:
There is no outperformance payment for water quality compliance. We have included a cap on the underperformance penalty at around £990k a year. This still equates to a material financial incentive that is coupled with a significant reputational incentive to maintain the highest quality water.

Enhanced underperformance penalties and outperformance payments
The PR19 Methodology proposes that enhanced outperformance payments should be available for frontier-shifting performance and, where they are applied, enhanced underperformance penalties must also be applied. We consider that many of our performance commitment targets are frontier-shifting but we are not seeking an enhanced outperformance payment for them.

We have included the option of earning enhanced outperformance payments, and associated enhanced underperformance penalties, on supply interruptions, leakage and usage performance commitments. These will only be available for significantly stretching performance.

For supply interruptions we have based the point at which the enhanced payment will apply at the level of the current best performer (Bournemouth Water) over the last two years. We have not applied a cap because performance is naturally capped at zero interruptions. We have applied a standard underperformance penalty collar for supply interruptions and therefore the enhanced underperformance payment will apply at four minutes. Performance at this level is likely to continue to represent above upper quartile performance and therefore we consider it appropriate to limit exposure to the enhanced outperformance penalty to performance that falls between four and five minutes.

For leakage and usage we have set the level at which the enhanced penalty will apply at a performance that is 75% worse than target. We have not applied a collar because performance is naturally capped at no reduction in leakage. We have set the level at which the enhanced payment will apply at a performance that is 75% better than target. We have capped the enhanced outperformance payment at double the target to protect customers from exposure for paying for service levels significantly beyond what they indicated was acceptable to them.

Impact on the Return on Regulated Equity
Outperformance payments and underperformance penalties impact on our shareholders' return on the investment they have made in the company – the Return on Regulated Equity (RoRE). Higher outperformance will lead to a higher return and poor performance will lead to a lower return.

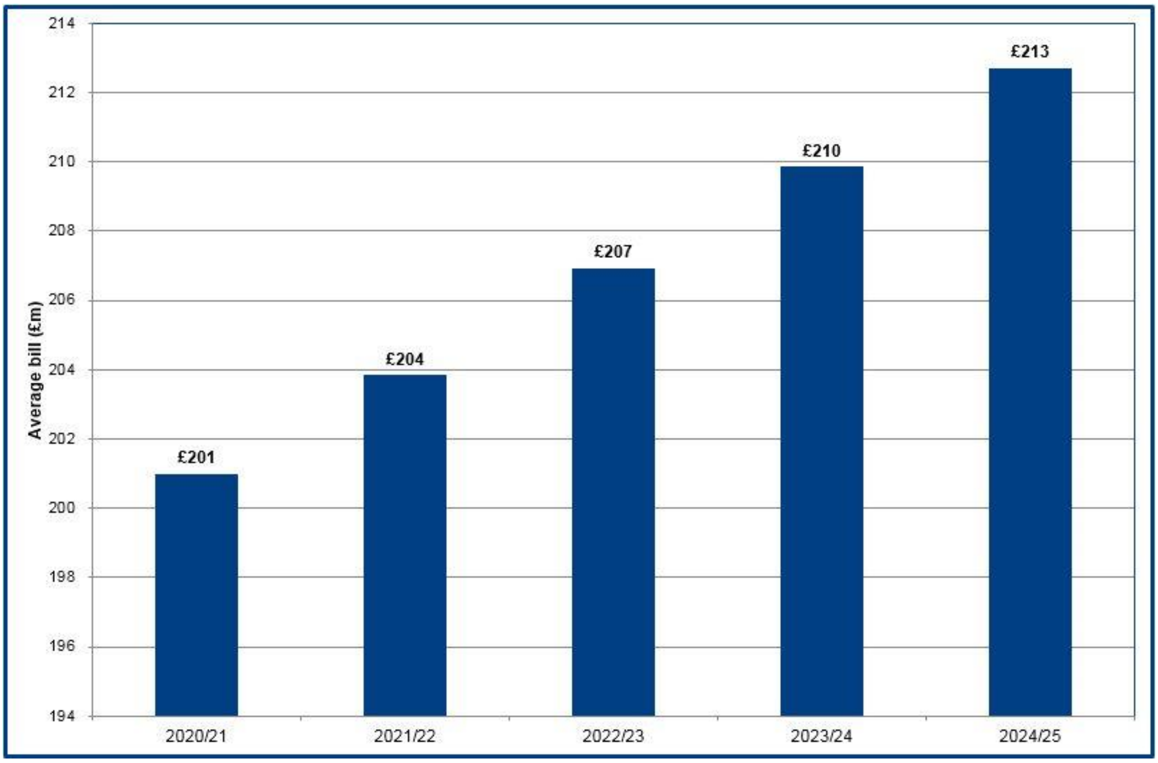
To estimate the impact on RoRE of the financial incentives we have included in our plan we have estimated the performance that we would achieve if there is a 10% chance of beating and failing to meet our performance commitment targets where financial incentives are available. These estimated performance levels are based on past industry variation in performance with judgement applied on the forward expectation of our ability to out- or underperform targets that are, in the majority of cases, more stretching than we have applied in the past.

This results in an underperformance to outperformance RoRE range of -1.6% to 1.2%, within the range advised by Ofwat in the PR19 Methodology. For further details on the RoRE ranges see the Financing Chapter.

What our customers will pay

From 2020 the average bill for the following five years will fall by £13 (before the impact of inflation) despite increasing investment to deliver the improvements that customers want to their service[2].

With the expected impact of inflation, the average household bill between 2020 and 2025 is expected to be £207. We are committed to keeping bills affordable and stable which is why the average bill won't jump from £200 in 2019/20 to £207 in 2020/21. In discussion with our Customer Scrutiny Panel, we intend to spread the rise across five years. Bills are therefore expected to increase from £200 in 2019/20 to £213 in 2024/25.



The average bill includes a charge for both wholesale and retail services for households. Delivery of retail services will be paid for through £33 of the average household bill of £207. This includes £6 that will be used to support customers in financial hardship through the Water Support Scheme. The cost to our customers for retail services is flat over the five year period reflecting the efficiencies in the plan that offset the cost of service enhancements and the expected impact of inflation. Delivery of wholesale services will cost the average household customer £174 a year on average. The cost for wholesale services increases over the five year period but by less than expected inflation, again reflecting the efficiencies we have factored into the cost of delivering enhanced services.

Since April 2017 businesses have been able to choose their retailer. We no longer offer retail services to business customers. Retailers pay us for the wholesale service we provide – taking the water from source to their customers' taps. The cost of wholesale services to retailers will increase year on year in-line with the increase in the household wholesale bill.

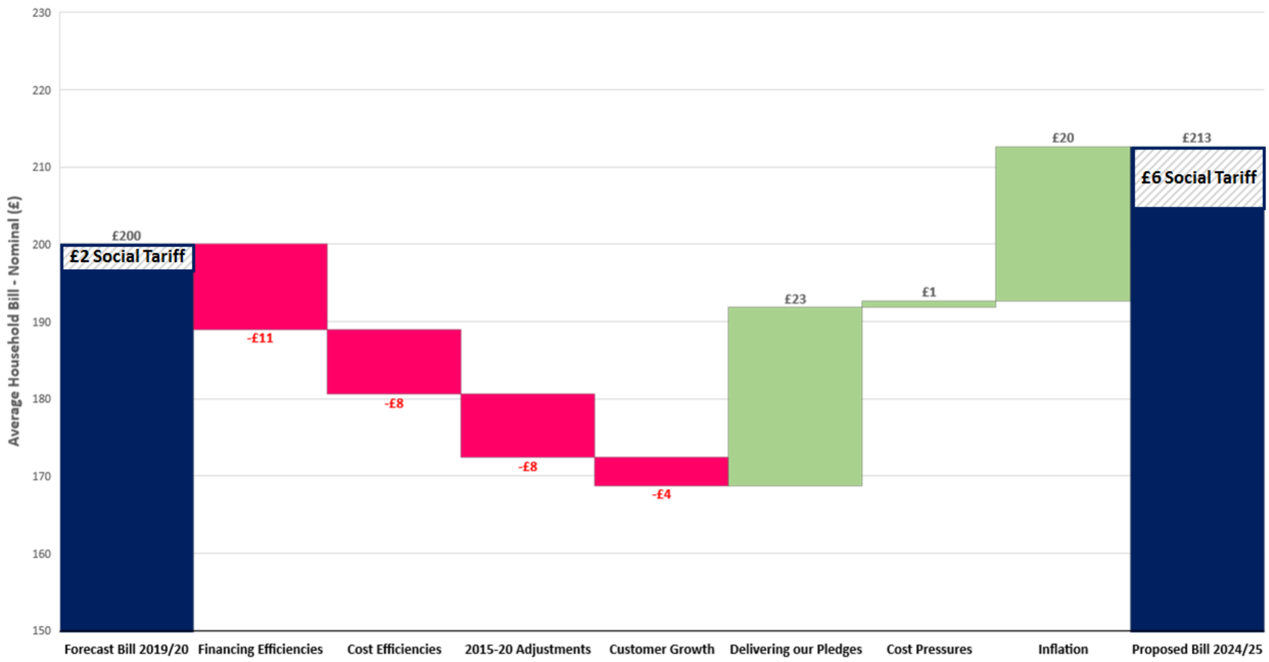
[2] Note, the average bill presented here includes the customer contribution, paid by the majority of our customers, to provide support to those customers in financial hardship who are on the Water Support Scheme. These values are therefore different from the values in the financial model which exclude this contribution.

We have continued to put the long term at the heart of our planning as demonstrated through our extended water resource planning period and our long-term projections for leakage and usage reduction. We have deliberately started some work earlier than is necessary to ensure that we can meet growing demand. This has an impact on bills in the short term but we consider it is the right thing to do and is supported by our customers. Longer-term projections therefore show that average household bills will be fairly stable with the average bill projected to be £221 in 2030. Growth will therefore be significantly below the expected rate of inflation between 2025 and 2030.

Why the average bill is changing

Between 2020 and 2025 we will invest to deliver the pledges we have made to our customers so we deliver what they have told us is most important to them. Our plans take into account significant efficiencies in delivering our pledges, however there is still a small increase in the cost to our customers so that we can pay for the investment they have asked us to make.

The chart shows the different and offsetting impact on the average bill from increased investment and greater efficiencies and each area is explained below.



- Financing efficiencies – a lower cost of capital reduces the cost to our customers by c. £13. This reduction is partly offset by the higher debt financing costs we will incur, when compared to larger companies who are able to access cheaper debt financing. This adds £1.75 to the average annual bill.

- Cost efficiencies – our plan reflects the ethos of delivering more for less. In total, planned expenditure has been reduced by 7% through inclusion of efficiencies in both purchasing of goods and services and in delivery efficiencies.

- Adjustments (2015 to 2020) – the adjustment takes account of two factors: a reduction in the bill because of the loss of the reconciling items related to performance over 2010 to 2015 which accounts for £5 of the average bill in 2019/20 and the forecast impact of reconciling items for performance in 2015 to 2020 which reduces the average bill by a further £3. The reconciling items for 2015 to 2020 performance include:

- A negative adjustment for further reconciliations required by Ofwat relating to performance in 2010 to 2015
- No adjustment for delivery of our performance commitments as we are forecasting that the outperformance payment for supply interruptions performance will be offset by a penalty under the Service Incentive Mechanism
- A reduction in the bill for the impact of the totex menu adjustment which accounts for the difference between allowed and actual expenditure over the period
- A reduction for the impact of a sale of land in 2015/16.

- Customer growth – we will have more customers by 2025 than we do now. The cost per customer decreases because the total costs are shared across more customers

- Delivering our pledges – we are investing to deliver what matters most to our customers for their long-term benefit and for the benefit of future generations

- Cost pressures – some costs are expected to increase by more than inflation. We expect to face pressure on our costs from increases in energy and wages. Together these two areas of cost make up 54% of total expenditure

- Inflation – inflation of 2% per year is included in the average bill shown above

- Social tariff – the cost of the Water Support Scheme is included in customer bills for those that are not eligible for the scheme. The £4 increase in the cost has been tested with customers who supported extending support to more customers in financial hardship.

More information about these areas is included in the Retail, Wholesale and Financing Chapters.

Providing good value for money

Our plan is targeted at delivering what matters most to our customers. Our engagement on the acceptability of the draft plan showed that 76% of customers supported the planned activity and the impact this would have on their bill. See Appendix A1.6 - Phase 3 acceptability research for the full results. This engagement also showed that customers wanted us to go further in some areas and were willing to pay an additional amount on their bill for us to do this. This feedback has been reflected in our performance commitment targets.

In the Retail and Wholesale Chapters we explain how we will deliver the performance commitments and how we will continue to focus on finding efficiencies in how we deliver to make sure our customers continue to feel that they receive good value for money. We are also committed to increasing support to our customers that are in financial hardship who may find that on occasion they aren't able to afford their water bill. The importance we place on this is demonstrated through our commitment to deliver our pledge to provide our customers with a service at a fair price and offer help when they need it.

Uncertainties that could change the amount that customers pay

The average bill may vary from the values outlined above. Actual inflation, how we perform and Ofwat's decision on our Business Plan could result in bills moving differently.

Additionally, the impact on an individual customer's bill will vary depending on whether they have a meter or not and how much water they consume.

Inflation:
The impact on the bill from inflation is estimated in the figures above assuming a year-on-year movement of 2%. Actual inflation may be higher or lower than this which will mean that bills may move differently from forecast.

How we perform:
The incentive framework described in this chapter provides for a financial penalty if we do not meet some of the performance commitment targets we have set ourselves. It also provides a financial incentive to deliver beyond our target for some performance commitments.

We are setting stretching targets for all our performance commitments and intend to deliver the targets set with the expectation that we will receive no penalties or outperformance payments.

However, bills will increase or decrease if actual performance is better or worse than the targets set. The performance in one year impacts on bills two years later so performance in 2020/21 will impact bills in 2022/23.

Ofwat's decision on our Business Plan:
In this Business Plan we outline a compelling deal for our customers and communities that will allow us to deliver a consistently high-quality service at a fair price now and well into the future. Ultimately it is a decision for Ofwat on whether they accept our proposed package of service improvements and cost to deliver. The outcome of Ofwat's review will be known in December 2019 and at this point we will be able to confirm the movement in customers' bills from 2020 to 2025.

Conclusion

Our Business Plan for 2020 to 2025 builds on strong performance during the current period against most of our performance commitments. It has been developed in partnership with our customers and delivers more of what matters to them. We have used customer insight to set five pledges which we'll deliver from 2020 to 2025. They are supported by 24 stretching performance commitments which reflect our customers' priorities - including going further to reduce leakage and customer usage. Of these, 11 have an underperformance penalty associated with them if we fail to achieve our target and nine are subject to an outperformance payment if we go further. This results in an underperformance to outperformance RoRE range of -1.6% to 1.2%, within the range advised by Ofwat in the PR19 Methodology.

From 2020 the average bill will fall by £13 (before the impact of inflation) despite increasing investment to deliver the improvements that customers want to their service. With the expected impact of inflation, the average household bill between 2020 and 2025 is expected to be £207. To keep bills affordable and stable we intend to spread the rise across five years. Bills are therefore expected to increase from £200 in 2019/20 to £213 in 2024/25.

CHAPTER 3

Retail

Our vision is to be an outstanding water company delivering service excellence

In this chapter you will hear about

- Our 'Customer Experience Transformation' programme – driving significant improvements in the service we provide.
- Our increased focus on helping customers in vulnerable circumstances.
- How we will operate more efficiently.

Delivering retail services

This chapter of our plan sets out how we will deliver retail services to our household customers between 2020 and 2025. It is focused on meeting our customers ever-growing expectations in a world of fast-paced advancements to service propositions. Although we remain a monopoly provider, we want to provide a service that means customers would choose us if they had the choice.

Our past performance in this area has been mixed. We have improved and increased the help we provide to those struggling to pay their bills and levels of debt are low. We'll do more of this with extra focus on providing non-financial support to customers experiencing challenging circumstances.

Most customers tell us through our regular surveys that they are satisfied with our service. But when customers have to contact us they are saying we could do better. This is reflected in our Service Incentive Mechanism (SIM) score – which is the current measure of customer service across the industry. Our complaint numbers have also been too high. We are making progress and starting to see the results of our improvement programme with SIM scores rising and complaint numbers falling. These improvements are being supported by our largest ever investment in digital technology, including a new Customer Relationship Management system, to deliver a more efficient and effortless experience to customers ahead of 2020.

Our future strategy is focused on further optimising our digital services and moving more customers onto online channels, increasing first-time resolution of issues through effective account management and supporting the fast-paced change to metered billing. But our focus on great service is wider than just helping those that contact us. It's about all our customer touchpoints, such as teams fixing burst pipes, our social media conversations, our local call centre and when their bill arrives. This is why we continue to focus on our vision to be an outstanding water company that delivers service excellence.

Our service today

We provide account management and billing services to around 266,000 household customers, handling over 150,000 enquiries a year from our contact centre in Redhill. Just over half of our customers have a meter and 60% pay their bills by direct debit – we send 268,000 paper bills every year and 45,000 customers receive theirs through our electronic billing system. Analysis using demographic classification data shows that although 20% of our customers are financially stretched, most can afford their bill. This has helped contribute to our low level of bad debt which we have maintained over many years.

The table below shows progress against our 2015 to 2020 performance commitments.

	2015/16 performance	2017/18 performance	2019/20 forecast	Progress
Offer good value for money and keep bills at a fair and reasonable level				
Proportion of customers who do not think their bill is good value for money	9%	9%	9%	Exceeding target
Customers on our Water Support tariff	5,686	8,150	11,451	Exceeding target
Bad debt as a % of turnover	0.75%	0.64%	0.64%	Exceeding target

Deliver consistently high levels of service				
Customer satisfaction with their water service	91.5%	92%	91%	Exceeding target
Service Incentive Mechanism (SIM) score	80.8 points	78.7 points	86.1 points	Behind target
Number of complaints (per 1,000 properties per year)	10	9.8	6.6	Behind target

We continue to achieve high overall levels of satisfaction. In our quarterly tracker surveys over 90% of our customers tell us that they are satisfied with their water service and only 9% think their bill does not offer value for money. We have continued to maintain industry leading levels of bad debt which remain less than 1% of turnover and we significantly exceeded our target to support those in financial hardship through our Water Support Scheme. More than 9,000 customers are now receiving help to pay their bills, nearly double our target. Our SIM score dropped over the course of the period which left us in the lower quartile but it is now rising and we are confident this will continue.

Understanding what matters to our customers

We are committed to being an insight-led business and have been using feedback from customers to improve our service. We have used a range of data sources that show how customers feel about the service we provide to identify the areas that are resulting in unwanted contacts and complaints. In addition to these business as usual sources, we have carried out the most extensive programme of customer engagement in our history to support the development of our Business Plan. More information on our engagement programme can be found in the Customer Engagement Chapter.

Our analysis suggests that dissatisfaction has predominantly been driven by bill accuracy and consumption queries, a need for improved digital services, more effective processes and better trained and equipped employees. This has led to the development of our Customer Experience Transformation programme which is a key part of our company-wide transformation programme, which you can read more about in our strategy section below.

Customer Service

Providing a faster and more responsive service

Since July 2017 we have answered more than 80% of customer calls within 30 seconds or less and reduced abandoned call volumes from a peak of over 10% to under 3%. We achieved this by restructuring the team and their shift patterns to make more people available when customers need them. A new telephony system has also helped us monitor and track employees' performance and bring in extra people from other areas when call volumes are at their highest.

The research we conducted largely supported our day-to-day insight. When asked about priorities, customers consistently put transactional services such as the call centre as amongst the lowest, with the quality of water and a regular supply unsurprisingly a higher priority. However, customers did highlight the importance of service being efficient and responsive when problems occur and the importance of clear communication and quick resolution.

Our customers also told us they value our local call centre and are willing to pay to keep it based in the area. They are also prepared to pay more to be served by a small company as they believe this offers a higher standard of service, amongst other benefits.

The potential for technology to improve services was identified by customers as an area where we could go further. They believe we should embrace smart technology and use it to provide them with more information about how much water they use and help them to take control of their bill. They also want more help and advice from us to reduce their water use – particularly alongside metering.

There is widespread support to help those with genuine financial difficulties to pay their bill and to offer additional help to customers in circumstances that make them more vulnerable – both financially and non-financially.

Our pledges for 2020 to 2025

We have, through this extensive engagement identified five pledges, with new performance commitments and stretching targets for each, which we are committed to delivering from 2020 to ensure we deliver more of what matters to our customers. Below we summarise the performance commitments related to enhancing our retail services. Together they will enable us to deliver great customer service to achieve our vision of service excellence.

Fair price and offer help when you need it

We will…	Where are we now…	This means by 2025…
Increase the number of people who financially benefit from our re-designed social tariff	We support over 9,000 customers against a target of 5,000.	19,000 eligible customers will be on our Water Support Scheme which provides a reduction on their bill
Increase the awareness of our Helping Hand Scheme and Priority Services Register with all customers	44% of customers surveyed tell us they are aware of the services we provide to our customers in vulnerable circumstances	58% of our customers will be aware of the extra support we can offer to those that need it
Ensure that our Helping Hand Scheme and Priority Services Register is helpful to those that benefit from it and also those that know about it	69% of customers surveyed by CCWater said they find the services helpful and easy to access	80% of customers asked will feel that the extra services we offer are helpful
Be clear about how we invest money from bills to limit the number of people who feel that their water bill does not offer good value for money	Currently less than 10% of customers surveyed are dissatisfied with their bill	No more than 10% of customers will be dissatisfied
Maintain our industry-leading low levels of money that is billed but not paid by customers	Bad debt as a percentage of turnover is below 1%	Bad debt will be no more than 0.8% of our total annual revenue

We will…	Where are we now…	This means by 2025…
Reduce the number of properties that are connected to our network but shown as vacant (void) so not billed	3.5% of properties are shown as vacant and so not billed	Void properties will account for no more than 2.2% of all properties in our supply area

Excellent service, whenever and however you need it

We will…	Where are we now…	This means by 2025…
Improve our level of service so we have amongst the most satisfied customers in the country	We are working with Ofwat to trial the new C-MeX approach to assessing satisfaction	We will be in the upper quartile in the industry league table
Reduce the number of times customers have to contact us about the same issue	75% of contacts are resolved first time	85% of all customer contacts will be resolved first time

Delivering developer satisfaction (D-MeX) is discussed in our Wholesale Chapter.

Our retail function will also play a key role in supporting elements of our wholesale plan, most notably our programme to significantly increase metering over the five-year period.

Transforming our service – our strategy

Delivering genuine and sustainable improvements to our service requires a long-term approach. We are committed to not only delivering a service that is comparable to the best in the industry, but also to leaders in other sectors. To do this we need to transform how we work and what we offer, whilst remaining agile so we can respond to changing customer expectations. We have started this work, which will continue over the next two years to provide us with a platform to drive further improvements over 2020 to 2025.

We are focused on managing every customer touch point as though they have a choice about their water supplier. We want to be known for providing an outstanding customer experience by:

- Providing our customers with a feeling of **trust** through affordable and predictable bills
- Providing our customers with a sense of **comfort** through first time resolution
- Providing our customers with **independence**, by providing a choice of contact methods and online account management
- Providing our customers with **confidence** through rich, proactive information and insight into their account
- Providing our customers with **reassurance** by improving their awareness and access to our priority services and financial support.

To support the delivery of our strategy we have joined the Institute of Customer Service to learn more from the 500 other members about best practice and innovation across all industries. We will also test ourselves and our service by striving to achieve the various service mark accreditations the Institute has to offer.

We will continue to make use of the extensive experience available to us through our relationships with our CCWater advocate and the Water UK Customer Services Network. We will also work more closely with our independent non-executive director who is general manager of Coca-Cola UK, Ireland and Northern Europe, one of the most recognised customer brands in the world.

Preparing for 2020 – our Customer Experience Transformation progamme

We have recognised the need to deliver a material improvement in our retail services and as a result, in January 2018 we launched our Customer Experience Transformation (CET) programme which is dedicated to improving the service we provide and forms a key part of our company-wide transformation programme. It includes four key areas of focus:

- Implementing a leading Customer Relationship Management system which will enable us to deliver a more automated and faster experience for our customers
- Deploying digital and online access for our customers, providing a more effortless end-to-end service
- Redesigning and continuously enhancing our processes based on our customers' needs, removing points of frustration and delay
- Delivering excellent customer service training and succession planning for our employees to provide an exceptional account management service for our customers.

The programme is being delivered over 2018 and 2019 and is intended to reduce complaints, increase first time resolution of enquiries, elevate service quality and provide support for those in vulnerable circumstances. Between April 2017 and June 2018, we achieved the following improvements:

- 24% fewer complaints
- 58% more customers being helped through our Water Support Scheme
- 49% more calls being answered within 30 seconds, rising to consistently answering 80% of all calls in that time
- 69% fewer abandoned calls
- 76% fewer open customer enquiries.

Additionally, since the programme began, we have achieved our highest ever 'billing' SIM scores in quarter four of 2017/18 and quarter one of 2018/19. While our industry position is still not where we want it to be, we are confident our efforts are ensuring we are heading in the right direction.

Our programme will provide us with a strong and resilient platform to continue improving the quality of our service and to deliver efficiencies and financial benefits that will be reinvested for the benefit of customers.

Increasing satisfaction through more accurate bills

One of our customers' frustrations has been the high proportion of estimated measured bills. Before September 2017 up to 15% of them were estimated each month but since April this year we have been able to read, on average, 97% of meters due to be read each month to provide more accurate bills. We achieved this by investing in more meter readers with more effective routes and better performance management. We are also bringing in a new meter reading solution which will reduce downtime and further optimise the meter reading routes, increasing productivity by around 20%.

Identifying all aspects of vulnerability

We have transitioned 11,500 customers back to direct service and billing who were previously billed through their rental agreements with local housing associations. Through this we trialled an enhanced approach to identifying financial and non-financial vulnerability indicators by leading 20 support events with customers at housing association sites and offices. These provided an opportunity to explain our service, bills, our Water Support Scheme, our Helping Hand Scheme and to direct our customers to local charities and advice services.

Beyond 2020 – delivering outstanding customer experience

As we move into 2020, our focus will shift to enhancing the wider customer experience we offer and providing a service that is comparable to the best in other sectors.

The introduction of Ofwat's new Customer Measure of Experience (C-MeX) is welcome as it provides a more holistic view of customer satisfaction and is in-line with our aim of providing service that is comparable to other companies that our customers hold in highest regard. Having completed the initial pilot in May and June 2018, we now know it will include two customer surveys:

- Satisfaction telephone-based survey of customers who have been in recent contact to request their feedback and to score our service from 0 – 10
- Experience survey of customers chosen randomly who have not necessarily been in recent contact - conducted over the phone, online and possibly face-to-face as well.

In the first C-MeX pilot we achieved a potential position of 13th out of 17 water companies in the satisfaction survey which is higher than we have ever achieved in SIM and extremely encouraging. We achieved 6th position in the experience survey, with our potential overall combined C-MeX score placing us 12th, evidencing the progress we are continuing to make in improving our service.

Our ambition is to achieve upper quartile C-MeX scores by focusing on four key areas:

1 - Optimising digital services:

We provide a service to all. This means we have to keep pace with the most tech-savvy of our customers but make sure that those that like to call us, or request a home visit, can continue to do so. Many of our customers have said they want us to make better use of technology and not fall behind others, so we plan to enhance our digital offerings. Whilst we were the first water company to offer paperless e-billing as a service, the improvements we are making through our CET programme will lay the foundations for a step-change in what we offer from 2020.

Our ambition is to create a more user-friendly and personalised digital service to encourage more than 60% of our customers to move to paperless and digital account management by the end of 2025. The transformation programme will introduce:

- Regular account statements and bill management advice
- Active campaigning and signposting for financial advice, water consumption and evolving topics of interest
- End-to-end self-service options including home move, payment and repayment plans, and self-serve appointment management
- Interactive video stories for bills, high consumption and potential leak checks.

Currently 20% of our customers are signed up to our existing e-billing service and 66% of customers are regarded as the ideal demographic groups for digital interaction. Repeat contacts are limited – only 6% of customers have contacted us more than ten times – with the top three reasons being payment and bill queries, high consumption and moving home. All three experiences are well suited for digital servicing. Our aim is to make the following shift in channels through to 2025.

% of contacts by channel	2018	2019	2020	2021	2022	2023	2024	2025
Phone	80.4%	80.4%	46.8%	39.4%	33.9%	30.0%	29.1%	29.0%
Email	5.6%	5.6%	2.9%	1.8%	1.0%	0.6%	0.6%	0.6%
Webchat	-	-	1.0%	2.6%	3.9%	4.8%	5.0%	5.0%
Letter & webform	14.0%	14.0%	6.5%	4.0%	3.0%	2.4%	2.3%	2.3%
Digital self-serve	-	-	42.8%	52.2%	58.2%	62.2%	63.0%	63.1%

From 2020 we will consider introducing additional services such as digital ‘buddies’, providing support and account management, similar to that of Barclays’ ‘Digital Eagle’ services. We will also consider partnering with a voice recognition service like Amazon’s Alexa and introducing video calling to provide customers with visual and audio support when navigating our website and customer portal. We will consider these and other initiatives by analysing our service, digital take-up and asking customers about their experience, to provide our customers with a richer service and aid our wider ambitions around the management of consumption and leakage.

2 - Implementing account management and first-time resolution:

We want to resolve at least 85% of all customer enquiries at the first point of contact. To help achieve this we are developing an online self-serve account management experience as we move towards 2020.

We expect our customers may still need to contact us from time to time and might still prefer to do so over the phone. We are therefore already investing in some of the best contact centre technology available, such as our effective workforce and planning solution which is listed in IT consultants Gartner’s ‘Magic Quadrant’ which maps the performance of technology providers. It has also won leading contact centre magazine ‘Call Centre Helper’ awards. We will also continue to invest in our employees to ensure they are trained to a high standard to better support our customers. Moving into 2020 and beyond, we will include expert training input from other specialist organisations including the Samaritans and Citizens Advice, and by obtaining training standards accreditations from the Institute of Customer Service.

3 - Supporting the roll-out of our metering programme:

Between 2020 and 2025 we plan to increase the number of households with meters from 60% to 90%. We know that such changes can be stressful for customers, and may create some concerns around affordability of bills. We will be on-hand to provide advice and support to make the change as effortless for our customers as possible. We will also use these customer touchpoints as an opportunity to gain a better understanding of their needs, particularly aiming to identify those that may need more ongoing support.

Developing a seamless, efficient and proactive customer journey will be essential to the successful roll-out of the programme. We will make our communications clear and easy to understand and look to neighbouring water companies that have gone through similar programmes for advice on what worked well and what didn't. We will ensure that resources are in place to provide a responsive service as we know failure to do so will impact on our C-MeX score and complaint numbers, as well as impacting on the success of the programme.

We will aim to make the most of digitalised self-serve journeys where customers can arrange their own meter installation appointment, and select from a range of promotions to assist their transition to metered billing. We'll also make sure that customers can still pick up the phone and talk to us. We will consider various options and incentives based on our past learnings and those of other water companies who have gone through a similar programme. Some of the options we will consider are:

- Continuing our two-year capped tariff and enhancing this with improved support for customers to change their consumption behaviours either through smart meters, or more regular information from more frequent meter reads
- A 'Go Digital' saving on their bill when they create an online account, opt for paperless billing, opt to pay via direct debit and submit their own meter readings.

Both of these options can be achieved through our meter reading capability and digital technology. We will also offer a free home water efficiency survey upon installation.

As more meters are rolled out we recognise that there is a higher risk of bill variations, bill shock and more contacts about high consumption. The enhancements to our digital services and the account management approach will be critical in mitigating this. We will also provide dedicated customer service resources and agree service level requirements with our installation teams to help ensure we meet customer expectations.

4 - Offering a service as if we were in a competitive market:

Although customers have no choice over their water supplier, we recognise it is essential we offer an experience which is comparable to that offered by other service providers.

In 2018/19 as part of our CET programme we will be upgrading our core Customer Relationship Management system to enable us to meet the existing and growing needs of our customers. We are also restructuring our retail teams to manage the improvements and changes being delivered by the programme. Realigning and improving the performance management of our people will ensure we deliver the core elements of our service more effectively for our customers. This is also, over time, expected to create a natural reduction or redeployment of resources, helping deliver the efficiencies discussed later in this chapter.

We will also be focusing on improving awareness and marketing of our services through additional service offerings such as:

- Personal home visits for our vulnerable customers
- Community, education and support forums
- Digital campaigning on key matters such as water usage
- Proactive bill management – if there's a potential problem like a leak, we'll investigate it before our customers receive their bill.

Supporting those that need financial assistance

We currently provide financial support to more than 9,000 customers. We forecast that there are more customers who are eligible and would benefit from financial support to pay their bills and we know our customers want us to do more to help them. Therefore, we are committed to doubling the number of customers we support through our Water Support Scheme, targeting 19,000 by 2025.

A key step towards doing this will be the collaborative work we are currently undertaking with water service providers in the south east to create a cross-regional network of organisations supporting customers facing financial and non-financial vulnerability. Our objective is to implement a common approach to supporting customers. This will increase the consistency of support across the region, removing unnecessary complexity and thereby allowing customers to access the support they require without having to contact multiple organisations. Our first area of focus, and one we are currently working towards, is the alignment of our social tariffs and a single sign-up model.

By doing this alongside our increased commitment to support 19,000 of our customers through our Water Support Scheme, our customers will be sure to receive the equivalent benefits and support for their waste services that are provided by Thames or Southern Water.

Following a design sprint with representatives of customers with expertise in financial vulnerability we have redesigned our Water Support Scheme and from 2020, thanks to their input, we will be advertising our discount tariff far more prominently with greater explanation of the support it provides. Following the sprint, we are also:

- Working with leading charity organisations and other water providers in the south east to refine our plans, including eligibility criteria
- Enhancing the role of our community liaison officers to offer more proactive help and support to our customers
- Considering introducing an 'authorised persons' or debt advice charity online account portal.

We will regularly evaluate and alter our eligibility criteria based on the evolving financial climate, relevance to customers and the level of accessibility.

In addition, we'll continue to offer 'Clear Start' which allows customers to repay their bills whilst receiving a discount in order to help them out of arrears and remain up-to-date with their payments. We are keen to extend this element of our service and will be redesigning how it works and the eligibility criteria to better reach and support our customers. We will do this in collaboration with Citizens Advice who we already work closely with on our Water Support Scheme.

We will first aim to help proactively through our Water Support Scheme as a preventative measure to avoid our customers going into arrears. However, we understand this will not always work so we will design and provide a wider range of support to customers that do go into arrears, and where possible, apply them beforehand. This will include interventions similar to those already offered such as retrospectively applying the Water Support Scheme discount for any arrears in the current financial year. We will also introduce 'breathing-space' delays, pausing any collection activities while our customers seek debt advice.

Beyond this we will also implement initiatives through the use of the Digital Economy Act 2017 which will enable us to proactively assist our customers by sharing customer data with government departments such as the Department for Work and Pensions. We will also explore how similar data sharing agreements with other water and utility companies can help to identify customers needing financial and priority services support.

Support for customers in vulnerable circumstances

We will do more to help our customers that are experiencing circumstances that make them vulnerable whether it's due to a short-term or a longer-term situation. We provide a vital public service so we need to make sure that everyone can access it appropriately and tailor our service to meet their needs. This is integral to delivering great service for all.

Our customers told us that they believe we should do more to help customers in vulnerable circumstances, but few were aware of the help we already offer so we are committed to increasing the awareness of our schemes and support. This is important as any customers could become vulnerable at any time, so they need to know about what we offer and how to access it. We also need to be better at identifying those that need help.

Our Helping Hand Scheme provides a range of additional services including emergency notifications and bills in large print or braille. From 2020 we plan to enhance it further by:

- Redesigning our customer correspondence and bills to clearly signpost our scheme and other leading charities and organisations that can provide help
- Actively campaigning through digital channels about our scheme
- Regularly completing customer research to understand levels of awareness and accessibility
- Training our customer liaison officers to actively engage with customers through local groups and meetings
- Creating online sign language videos about our service and the schemes on offer
- Training customer liaison officers and customer service advisors in sign language for face-to-face and video call engagement
- Deploying text relay to our website and online customer portal
- Training our teams in mental health awareness with the Samaritans and introducing call transfer options
- Providing an appointment-based home visit service, and where necessary, partnering with debt advice charities.

Managing debt

Our approach to the collection of revenue, including the range of payment options and schedules offered to customers, and our processes if customers do get into debt with us are the reason for our industry leading position on debt management. We will maintain our performance and continue to manage debt-related costs through minimising recovery and court expenses and offering more financial support options.

We plan to improve our overall performance in this area by increasing the percentage of customers who, although in debt, are making payments - from 18% in 2017/18 up to 24% in 2020 and 35% by 2025. We will do this through digital and telephony campaigning to those who are not on a repayment plan and also through debt preventative measures to avoid our customers entering into arrears. We will also use payment method campaigns to encourage our customers to adopt preferred payment methods such as direct debit. To achieve this we will:

- Introduce proactive messaging and signposting for debt advice
- Introduce the option for payment due alerts via email and SMS
- Introduce outbound digital and call campaigns for those in the early stages of arrears or in debt who are not paying
- Improved negotiation and collections training for our employees.

We have an excellent record in this area and are committed to further improvements. In many ways this is business as usual but we will continue to strive to do more.

Delivering our pledges for 2020 to 2025

Below we summarise how we will deliver our retail performance commitments under each of the pledges introduced earlier in this chapter.

We'll provide your service at a fair price and offer help when you need it

Supporting customers in financial hardship – increase the number of people who financially benefit from our re-designed social tariff
Why are we focusing on this?
Our Water Support Scheme, introduced in 2014/15, has been successful and we have heard from customers that it really does make a difference. It also reduces the likelihood of customers entering our debt management process. Customer and stakeholder engagement has demonstrated continued support for this service and the Government position, which established the framework for financial support schemes, has not changed. We therefore intend to continue offering a financial support scheme and increase the number of customers that are aware of it and benefit from it.
How will we achieve our commitment?
We will enhance our scheme by: • Adapting eligibility criteria to make sure it reaches those customers that need it most, e.g. the removal of multiple specific benefits being required • Aligning our eligibility criteria with our neighbouring water companies • Making the application process as easy as possible • Working with third parties such as foodbanks to reach more customers • Enhancing the role of our customer liaison officers in the community • Using engagement through our metering programme to identify eligible customers.
By 2025:
19,000 eligible customers will be on our Water Support Scheme which provides a reduction on their bill.

Vulnerable support scheme awareness – increase the awareness of our Helping Hand Scheme and Priority Services Register with all customers
Why are we focusing on this?
There is a need to offer support to our customers who are in vulnerable circumstances for reasons other than financial hardship and our engagement supports this view. We need to do more to raise awareness to our whole customer base as anyone could become vulnerable at any time.
How will we achieve our commitment?
We will: • Work collaboratively with the rest of the water industry and the gas and electricity companies to implement ways of sharing best practice and customer information so we can proactively support those who need it without our customers necessarily having to contact each of their utilities separately • Work closely with leading organisations such as Citizens Advice to obtain greater insight into how we can provide support, develop our employee training, and best methods for engaging with our customers • Introduce more customer liaison officers to host public events and offer a one-to-one and home visiting service • Redesign our customer communications to make them more engaging, easier to understand and so they signpost our additional support and other external services.
By 2025:
58% of our customers will be aware of the extra support we can offer to those that need it.

Vulnerable support scheme helpfulness – ensure that our Helping Hand Scheme and Priority Services Register is helpful to those that benefit from it and also those that know about it
Why are we focusing on this?
We realise how important it is for our support services to remain both relevant and helpful. We are committed to continued engagement with customers, and those who represent them, to make sure we meet expectations and deliver help that makes the lives of these customers easier.
How will we achieve our commitment?
We will: • Use customer feedback to highlight any challenges our customers experience and take action to resolve them • Work collaboratively with other utilities and leading charity organisations to understand best practice and keep up-to-date.
By 2025:
80% of customers asked will feel that the extra services we offer as part of the scheme are helpful.

Deliver value for money – be clear about how we invest customers' bills to limit the number of people who feel that their water bill does not offer good value for money
Why are we focusing on this?
We feel that our service represents great value for money but we recognise how important

it is for our customers to feel the same, especially as we start to deliver our pledges from 2020.
How will we achieve our commitment?
We will: • Deliver what matters most to our customers through the five pledges we have outlined in this plan • Re-design our bills and customer correspondence so when we communicate with customers they have a greater understanding of what they are getting for their money, which can be challenging when access to high quality water in this country is often taken for granted. • Deliver the CET programme which will help provide more real-time customer insight which will allow us to target actions to improve customers' perceptions of value.
By 2025:
No more than 10% of customers will be dissatisfied with the value for money.

Managing bad debt – maintain our industry leading low levels of money that is billed but not paid by customers
Why are we focusing on this?
As with all businesses, customer debt drives increased cost to serve by requiring greater resource to help service those in debt, including tracking, monitoring and recovering debt from customers who do not pay their bills on time. Good debt management therefore benefits all customers.
How will we achieve our commitment?
We will: • Promote debt support services including our own Water Support Scheme • Offer various repayment schemes, such as Water Direct, Water Sure, and Clear Start for our customers who are finding it difficult to pay their bills • Implement various digital account campaigns to customers who are in arrears or debt.
By 2025:
Bad debt will be no more than 0.8% of our total annual revenue.

Void properties – reduce the number of properties that are connected to our network but shown as vacant (void) so not billed
Why are we focusing on this?
Historically we have seen our empty property volumes sit at around 2.4% of all properties but this has increased in the past three years. We have identified that this has been a result of data integrity challenges and the need for improvement in our home move processes. We recognise the importance of managing the number of void properties to make sure that those using water are charged for it. We are therefore targeting a reduction but there will always be some voids on our records because properties can remain empty for some time.

How will we achieve our commitment?
We will: • Visit properties known to be void to identify if it is still vacant or has been redeveloped – this follows a successful trial in 2018 • Consider metering void properties to prompt identification of a customer when the property becomes occupied.
By 2025:
Void properties will account for no more than 2.2% of all properties in our supply area.

We'll provide excellent service, whenever and however you need it

Customer satisfaction (C-MeX) – improve our level of service so we have amongst the most satisfied customers in the country
Why are we focusing on this?
C-MeX will be the new customer satisfaction and experience measure from 2020, replacing the Service Incentive Mechanism. This measure has been agreed between all water companies and our regulator and is currently being trialled. This is extremely important to us as we continue to strive to deliver service excellence, and a measure we feel is more rounded and holistic than that of SIM.
How will we achieve our commitment?
We are looking to achieve this by delivering our CET programme which will then enable us to continue making iterative improvements to our service from 2020, based on ongoing customer feedback and insight. Further information on the actions that will be taken are included in our strategy section above.
By 2025:
We will be in the upper quartile in the industry league table.

First contact resolution – reduce the number of times customers have to contact us about the same issue
Why are we focusing on this?
Feedback from customers has highlighted the need for quick and easy resolution of issues when they occur and a service that is responsive to their needs. Our current performance for first contact resolution is around 75% and it is having a detrimental effect on our SIM score. We understand our customers' time is important to them so we need to make their experience as effortless as possible.
How will we achieve our commitment?
We will: • Design our processes and continuously improve them based on customer feedback and insight, targeting points of frustration and process shortcomings • Continue to evolve our structure to support this insight-led approach, including the role of business analysts to build and redesign our processes and project managers to manage improvement programmes as cost effectively as possible.

By 2025:
85% of all customer contacts will be resolved first time.

Improving our Customer Charter

In addition to our performance commitments we offer specific service guarantees through our Customer Charter, which we will update in readiness for 2020. Our Customer Charter references payments that will be made when we fail to deliver expected standards. As a minimum, these will be aligned with the Guaranteed Standards Scheme (GSS) payments which are currently being reviewed by Ofwat.

These planned changes to our Customer Charter reflect our ongoing commitment to provide an excellent customer experience, and in summary will be:

- Providing clarity and precision by reducing appointment time slots down to a two-hour window
- Providing a faster service by reducing our response time for account queries and payment queries from ten days and five days respectively to two days
- Being more accountable and responsive when our customers need us most by reducing our response time for complaints from ten days to five days
- Preventing delay and the need to repeatedly contact us by committing to install a meter within four weeks of arrangement
- Providing accurate and predictable bills by committing not to estimate a customer's bill
- Providing a high-quality service by committing to reinstating the ground after works on or by our customers' property first time
- Committing to automatically making the guaranteed standards payment if customers experience low water pressure
- Providing our customers with confidence and remunerating them if we haven't by committing to paying customers an additional payment if we fail to pay or apply any of our standards payments within two weeks.

Our Customer Charter in more detail:

Standard	What we promise now	What we will promise in 2020
Appointments to visit you	• We will make appointments to visit either before or after 1pm. If you request a more specific appointment, we will offer one within a two-hour time band • If for any reason we are unable to keep the appointment, we will let you know 24 hours in advance • If we fail to meet this standard we will automatically pay you £30.	• We will make appointments to visit you within a two-hour time slot and where available this will be of your choosing • If for any reason we are unable to keep the appointment, we will let you know 24 hours in advance • If we fail to meet this standard we will automatically pay you the guaranteed standards payment.

Standard	What we promise now	What we will promise in 2020
Account queries	• If you write to query the accuracy of your bill, we will reply within 10 working days • If we fail to meet this standard we will automatically pay you £30.	• If you contact us to query the accuracy of your bill, we will reply within two working days, or provide you with a date whereby we will resolve this for you. • If we fail to meet this standard we will automatically pay you the guaranteed standards payment.
Requests about payment arrangements	• If you write asking us to change the way you pay your bill, but we are unable to, we will tell you within five working days. If we fail to meet this standard we will automatically pay you £30.	• If you contact us asking to change the way you pay your bill, but we are unable to, we will tell you within two working days and offer all other alternatives to you. If we fail to meet this standard we will automatically pay you the guaranteed standards payment.
Complaints about water services	• We will respond to written complaints about your water services within 10 working days • If we fail to meet this standard we will automatically pay you £30.	• We will respond to written complaints about your water services within five working days or notify you if we need more time to investigate the matter for you • If we fail to meet this standard we will automatically pay you the guaranteed standards payment.
Meter installation	• We have not previously offered this as a guaranteed standard.	• We will install your meter within four weeks of this being requested or arranged by us • If we fail to meet this standard we will automatically pay you the guaranteed standards payment.
Meter reading and estimated bills	• We have not previously offered this as a guaranteed standard.	• We aim to read your meter at least twice per year and to not estimate your bills • Other than in cases where your meter could not be reached due to unforeseen obstruction, if we fail to meet this standard we will automatically pay you the guaranteed standards payment.
Reinstatement after works at your property	• We have not previously offered this as a guaranteed standard.	• When we fit a meter on or at your property boundary we will permanently reinstate the ground as it was before we started, as soon as the work is completed • If we fail to meet this standard we will automatically pay you the guaranteed standards payment.
Notice of planned interruption to your water	• If your water supply is going to be off for more than four hours because of planned work on the water mains, we will give you	• If your water supply is going to be off for more than three hours because of planned work on the water mains, we will notify you at

Standard	What we promise now	What we will promise in 2020
supply	written notice at least 48 hours in advance • We will restore your supply within the time we have told you in the written notice • If we fail to meet this standard we will pay you £30 if you are a household customer and £60 in any other case.	least 48 hours in advance • We will restore your supply within the time we have told you • If we fail to meet this standard we will pay you the guaranteed standards payment.
Notice of emergency interruption to your water supply	• If we need to cut off your supply in an emergency we will tell you as soon as possible about any alternative supply, when your water will be back on and where you can get further information.	• If we need to cut off your supply in an emergency we will tell you as soon as possible about any alternative supply, when your water will be back on and where you can get further information.
Where your water supply is not duly restored	• In the case of a burst main or other emergency, we aim to restore your supply within 12 hours • For planned work, we aim to restore supplies by the time we have given in the notice you receive from us • Repairs to our major trunk mains may take longer. In these cases, we aim to restore your supply within 48 hours • If we fail to meet this standard we will pay you £30 if you are a household customer and £60 in any other case. We will also pay you £20 or £35 respectively for each additional 24-hour period you are without water.	• In the case of a burst main or other emergency, we aim to restore your supply within 12 hours • For planned work, we aim to restore supplies by the time we have given in the notice you receive from us • Repairs to our major trunk mains may take longer. In these cases, we aim to restore your supply within 48 hours • If we fail to meet this standard we will pay you the guaranteed standards payment. We will also pay you £20 if you are a household customer or £35 in any other case for each additional 24-hour period you are without water.
If there is a problem with your water pressure	• If your water pressure drops below seven metres static head twice within four weeks (each time for longer than one hour), you can claim £35 • This does not apply if the drop is because of a burst, planned work we are doing on the water mains, or because of problems with your own pipework.	• If your water pressure drops below seven metres static head twice within four weeks (each time for longer than one hour), we will automatically pay you the guaranteed standards payment This does not apply if the drop is because of a burst, planned work we are doing on the water mains, or because of problems with your own pipework.
If there is a problem with your sewerage and wastewater	• Sewerage and wastewater services are the responsibility of either Thames Water Utilities or Southern Water Services, depending on where you live.	• Sewerage and wastewater services are the responsibility of either Thames Water Utilities or Southern Water Services, depending on where you live.

Standard service	What we promise now	What we will promise in 2020
Credit in place of payment and time for payment and credit	• We may credit your account with any of the payments due under these Standards • If you owe money to us, the credit will not be more than the amount you owe • Where the payment is automatic, and we fail to make it, we will pay you an additional £30 if you make a claim within three months.	• We may credit your account with any of the payments due under these Standards • If you owe money to us, the credit will not be more than the amount you owe • Where the payment is automatic, and we fail to make it within two weeks of it being due, we will pay you an additional guaranteed standards payment.
Reference to the Water Services Regulation Authority (Ofwat)	• If we disagree about your right to a payment, either of us can refer to Ofwat • If we do not comply with Ofwat's decision, you can deduct any money they say is due to you from money you may owe to us.	• If we disagree about your right to a payment, either of us can refer to Ofwat • If we do not comply with Ofwat's decision, you can deduct any money they say is due to you from money you may owe to us.
Payments not to affect other legal liabilities	• If we make a payment to you, it does not mean we admit any liability • If you accept a payment, it does not affect our liability to you.	• If we make a payment to you, it does not mean we admit any liability • If you accept a payment, it does not affect our liability to you.

Cost and efficiencies

Our retail plan will be delivered for £36.4m over 2020 to 2025 which includes the expected impact of inflation on our costs. This is an investment of, on average, £7.3m each year, or £25 per customer per year. The chart below summarises the annual investment we will make to deliver our retail services pledges:

Expenditure is stable over the five-year period despite providing services to around 5% more customers at the end of the period and with significant growth in the number of customers that have a meter, and despite an expectation that costs will rise due to inflation.

This expenditure supports both the customer facing teams and the support functions necessary for daily operations including human resources, finance and IT. These support services are shared between the retail and wholesale businesses and forecast costs have been allocated in accordance with regulatory requirements.

Our costs today

The last price control review (PR14) provided an expenditure allowance per customer for retail services to measured and unmeasured customers. We have consistently spent more than was allowed, reflecting the impact of inflation not being included in allowances and the decision we took to invest in improved service delivery. With the launch of our CET programme in January 2018, we expect to spend more than was allowed in the remaining two years of this period. Importantly, this has not and will not impact on customers' bills. Any overspend on delivery is paid for by our shareholders.

Our CET programme is focused on elevating the end-to-end customer experience and driving efficiencies in future years. We are investing now to deliver long-term efficiency savings.

Drivers of cost changes from 2020 to 2025

As shown in the chart above, costs are stable each year. However, this masks a number of impacts – movements in expenditure for delivery of pledges, changes in customer numbers and method of billing, efficiencies, input price pressure – which we explain below.

Enhancing our service

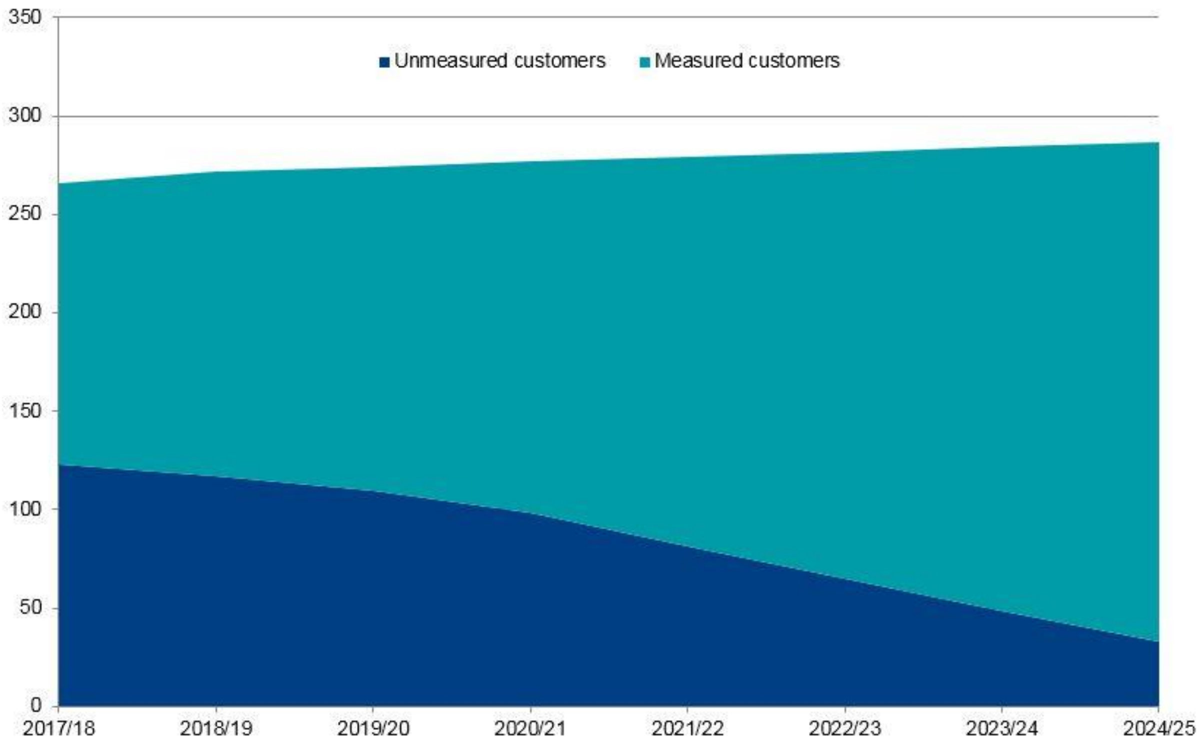
As we have described we are investing now through our CET programme to deliver enhanced performance by 2020. There will be an additional investment of £0.5m over 2020 to 2025 to deliver our pledges, including:

- Water Support Scheme - £50,000 more per year to administer and advertise the scheme.
- Management of debt and void properties - £40,000 per year to improve systems and processes. Without this investment we expect services would deteriorate as customers move back to direct service and billing who were previously billed through their rental agreements with local housing associations.

The majority of our pledges will however be delivered as business as usual and come at no extra cost to our customers from 2020 to 2025.

Growth in customers

The number of customers we serve is expected to grow each year. By 2024/25 we expect to be serving nearly 287,000 households – 8% more than we currently serve. There are some economies of scale – for example the fixed costs of operating and maintaining our billing and telephony systems – meaning that costs don't grow at the same rate as customers. We will however need to increase resources to serve more customers.



Our metering programme will mean that by 2024/25, 90% of customers will have a meter, up from 60% that are expected to be metered by 2019/20. Cost to serve a metered customer is higher due to reading the meter, the billing process and the greater likelihood of a metered customer contacting us. In the absence of the efficiencies we have included in the plan (as we describe below) expenditure would be higher in order to meet the needs of our growing and changing customer base.

Efficiencies

In total, £2.4m of efficiencies are included in our expenditure forecasts. That's a 6% reduction in costs.

The investment we are making now through our CET programme will deliver savings from day one of the 2020 to 2025 period. The efficiencies driven from this programme, as well as the ongoing efficiencies that might be expected of even the most efficient business ('frontier efficiency') have been accounted for in the expenditure forecasts included in this retail plan.

Expenditure forecasts have been derived at a granular level by cost category. For operating expenditure, we have assumed efficiencies across all types of expenditure. In 2020/21 expected efficiency savings are driven, primarily, from the CET programme. These efficiencies vary across the planned activity. From 2021/22 we are planning on the basis of delivering ongoing efficiencies of 2% a year, meaning that by 2024/25 we are ensuring that the same activity can be carried out with 8% less operating expenditure than in 2020/21. We have also assumed efficiencies across our capital expenditure plans.

We have confidence that our targeted efficiencies are achievable and sustainable. They will be delivered through:

- The new billing and customer relationship management system that will be in place by 2020 which will automate more complex customer journeys and give us improved functionality to manage contact levels by channel and help with resource planning
- The new online platform, which again will be in place by 2020, will allow customers to self-serve, reducing the contacts we receive
- Further deployment of our target operating model will ensure we are appropriately resourced across all customer activities within retail, retaining a lean workforce capable of servicing our customers to a high standard.

Input price pressure

Employment costs make up 56% of our retail services expenditure. We have analysed the likely movement in general inflation and wages up to 2024/25 using independent forecasts. Wages are expected to grow at around 1% more per year than the CPIH measure of inflation. Other costs are expected to increase with inflation and we have included a forecast for growth in the CPIH measure of inflation of 2% per year for all other expenditure. This has added £0.9m to our expenditure forecasts in total over 2020 to 2025.

Further information on these forecasts can be found in Appendix A12.2 - Business Plan data table commentary (see App24a).

Other impacts on our costs

Our customer contact centre is located in the south east of England, as are the team that supports our contact centre. We know that employing people in this part of the country costs more than it does in other areas. We therefore consider that this should be taken into account when our expenditure plans are compared to other companies when considering the efficient cost at which we can deliver the service our customers expect.

We recognise that we could relocate our contact centre to another area to avoid these additional costs but our customers do not support this. We have consistently heard through our engagement that customers value being served by a local company and this means our employees need to be in the local area. The four main reasons given were:

- Better customer service: “A modern service which is easy to understand”
- Having local knowledge: “It’s easier to deal with someone that has local knowledge of the area”
- Easier/quicker communication: “They are able to respond quickly to issues that matter to me”
- Provide jobs for the local community: “Local supplier employing local people”.

More information is available in Appendix A1.4 – Phase three small company research report.

We also tested our customers’ willingness to pay for a local customer contact centre and the results show resounding support for this. Customers would expect to be compensated through a bill reduction of 1.4% if we located the contact centre elsewhere in the UK. For full results see Appendix A1.3 - Phase 2 quantitative research. Our analysis suggests that this is more than the savings we could make.

Conclusion

Our retail plan is key to delivering two of our five pledges and supports much of our wholesale activity. During the current period our service has not been as good as we or our customers expect but we are addressing this. We are starting to see improvements in our SIM score and the focus of the remainder of this period is to progress our Customer Experience Transformation programme, ready for the start of 2020. This will put us in a strong position to deliver our performance commitments, in particular C-Mex, which we welcome the introduction of to provide a more holistic view of customer satisfaction.

The increased digitisation of our services and more self-service options will be the focus of our efforts from 2020, alongside enhanced account management and first-time resolution of contacts. We’ll support the move to 90% metering, providing customers with a great service at the point of installation and through the transition to metered billing.

We’ll help more customers to pay their bill and we’ll work with community partners to make sure those that need extra help receive it. We’ll also make sure that the non-financial support we provide is helpful and effective – both for those in permanent situations that make them vulnerable and those that find themselves in difficult circumstances for a short period of time. Increasing awareness of what we offer is critical, so people know that help is there if they need it.

Ultimately, we want to provide a service so good that if customers had the choice, they would choose us.

CHAPTER 4

Wholesale

The core part of our Company, delivering water from source to tap

In this chapter you will hear about

- Our strong track record.
- Our challenges for the future and how we plan to meet them.
- What we will deliver for our customers, including a reliable supply of high quality water – their number one priority.

Delivering wholesale services

Section one: How our wholesale services plan delivers our pledges

This chapter of our plan describes how we will deliver wholesale services to our customers between 2020 and 2025. It is set in a long-term context, with the activity we deliver over this five-year period focused on not only delivering for now, but also securing a resilient and high quality service for the future.

It builds on strong foundations, thanks to the ongoing, targeted investment we have made over multiple planning periods which has resulted in us achieving upper quartile, and industry leading, performance on a number of key measures. It will deliver even more stretching performance in areas which customers have told us matter most to them – shifting the performance frontier for the rest of the industry and standards for customers across England and Wales.

It covers the areas of securing future water resources, operating efficient and resilient infrastructure, maintaining high quality water supplies and enhancing the environment. Our plan proactively addresses key challenges that we face including climate change, population growth, water scarcity, changing customer behaviour and environmental protection.

Our commitment to innovation, very much enabled by our small size and strong culture, is demonstrated through a range of projects that support our long-term strategy and the delivery of our performance commitments for 2020 to 2025.

The expenditure needed to deliver the service expected has been split appropriately into water resources and water network plus. We'll spend £23.3m in water resources, abstracting water supplies for customers from our river and underground sources over the five years. Investment of £230.0m will be made to treat and transport water (together – water network plus activities) from source to tap and increasing the resilience of the service we provide. We will deliver higher service for lower cost with efficiencies of £18.7m included in our plan.

Our service today

We provide wholesale services to 707,000 customers. This includes 266,000 households and to retailers serving 13,000 local businesses. On an average day we supply 160 million litres of water, which can rise to 260 million litres during a hot summer. Water is abstracted primarily from underground sources beneath the North Downs with the balance coming from the River Eden and stored in Bough Beech reservoir. We operate a network of eight water treatment works, 24 pumping stations and 3,500 km of water mains.

Progress against current performance commitments

Our performance over many years has been strong and progress on delivery of our 2015 to 2020 performance commitments is outlined in the following table.

	2015/16 performance	2017/18 performance	2019/20 forecast	Progress
Provide a reliable and sufficient supply of safe, high quality drinking water				
Supply interruptions over 3 hours (average minutes per household)	6.3	3.2	2.8	Exceeding target

Number of burst mains	212	214	219	Exceeding target
Overall water quality	99.95%	99.98%	99.98%	On target
Taste, odour and discolouration contacts	419	365	365	Behind target
Water softening	On track	On track	Deliver programme	On target
Security of supply index	100%	100%	100%	On target
Increase the resilience of our network to drought, flood and equipment failure				
Water restrictions	None	None	None	On target
Number of customers supplied by more than one treatment works	36%	36%	56%	On target
Reduce our impact on the environment while seeking to make a positive contribution to its quality				
Leakage (million litres/day)	24.2	24.2	24.0	On target
Environmental education programme (no. of people)	13,314	9,551	10,000	On target
Customer usage reductions through metering (litres per person per day)*	161	159	157	On target
Greenhouse gas emissions ($kgCO_2eq/Ml$)	470	376	55	Exceeding target
Pollution incidents	2	2	0	Behind target
National Environment Programme projects	0	0	14	On target

* These figures are based on our current methodology for reporting litres per person per day which is changing from 2020.

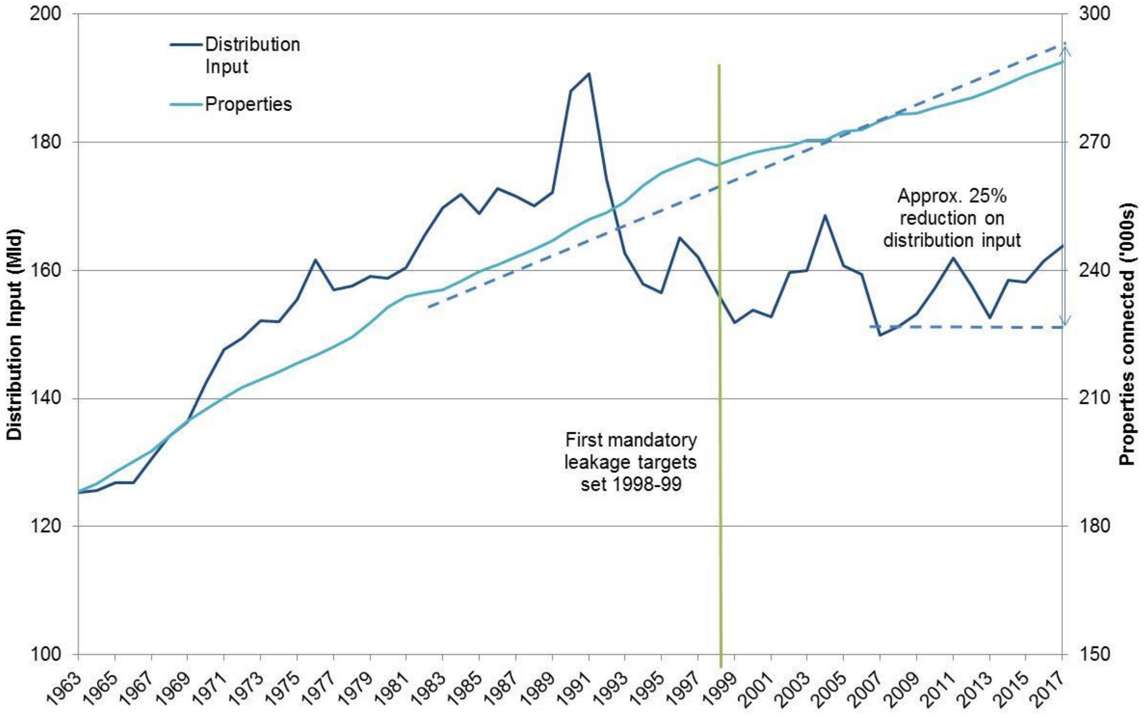
Many of our current performance targets will continue to be measured between 2020 and 2025, becoming even more stretching, in-line with our customers' expectations.

Highlights of our performance include having one of the lowest levels of interruptions to customers' supplies in the industry, experiencing almost half the number of burst mains per 1,000km of pipe than most other companies, receiving the lowest level of contacts about taste, odour and discolouration and consistently achieving upper quartile leakage performance.

Reducing distribution input

We have reduced the amount of water that we abstract from the environment and put into supply, our distribution input (DI), by some 25% since the early 1990s, despite a growing population. This is shown in Figure 1 below. This is largely due to our strong leakage performance, a result of our proactive mains replacement programme and the use of data from our District Meter Areas (DMA) that has supported targeted and effective management of leakage.

Figure 1: Distribution input over time



In addition, we have reduced customer demand. By the end of this period we will have increased metering to 60% and our per capita consumption (PCC) will be 145 litres per person per day. This is based on the new methodology for calculating PCC which will be used going forward and brings the way we measure it in-line with the rest of the industry.

Water savings in Worcester Park

In January 2016 we began a programme of water efficiency home visits in partnership with Save Water Save Money in the Worcester Park area of south west London.

Over a three-month period, we visited nearly 400 homes to fit a range of water efficient devices including showerheads, leaky loo testing strips, shower timers, save-a-flush bags and Bubblestreams.

The completed programme delivered savings of 23,280 litres per day, an average of 59 litres of water per property per day.

Delivering our resilience programme

We have, since 2010, been progressing a resilience programme to enable the transfer of water from Bough Beech Treatment Works to the north of our area, which was previously completely reliant on groundwater supplies. Focus to date has been on initial extension work at Bough Beech and the development of the strategic water grid, including a 17km strategic main between Outwood and Buckland pumping stations between 2010 and 2015. In this five-year period we are delivering further enhancements to the network, so by 2020 we'll be able to supply 56% of our customers from more than one treatment works. This includes constructing or reinforcing strategic mains between:

- Burgh Heath service reservoir to Nork service reservoir
- Woodmansterne Treatment Works to Purley
- Buckland Pumping Station to Headley Service Reservoir
- Blindley Heath Service Reservoir to Outwood Pumping Station.[1]

This work is needed to complete this programme and enable us to supply 100% of customers from more than one treatment works, something that is supported by customers. The investment required is included in this plan for completion by 2025.

Enhancing the environment

We have met all our obligations to date set out through previous versions of the Water Industry National Environment Programme (WINEP). This has included work on the River Wandle in partnership with the Environment Agency, South East Rivers Trust and Thames Water to restore the river, so it meets the requirements of the Water Framework Directive. We have also delivered a programme of catchment management to address challenges posed by metaldehydye at Bough Beech reservoir. This has involved increased monitoring and working with the local farming community to reduce levels in the raw water and ensure compliance – which has been achieved since 2010.

Understanding what matters to our customers

Our engagement programme, detailed in the Customer Engagement Chapter, has supported the development of both our PR19 Business Plan and our revised draft Water Resources Management Plan (WRMP). The two plans have been developed in parallel, with customer and environmental priorities at the heart of both.

Our engagement with customers has consistently shown that receiving high quality water is their top priority. They expect a reliable and resilient service now and, in the future, regardless of the challenges we face. They want us to do more to tackle leakage and if we do, they are prepared to do their bit by reducing how much they use. There is also an expectation that we'll innovate to deliver sustainable and resilient supplies.

Our day-to-day contact with customers regarding our wholesale service is generally low, but when we do experience problems that impact customers we need to improve how we respond and communicate. We've collaborated with customers to help us understand their needs, so we can improve how we do this. We also recognise that to achieve many of our key pledges we need to encourage greater customer participation, and this is a priority for us.

Our pledges for 2020 to 2025

We have, through this extensive engagement identified five pledges, new performance commitments and stretching targets for each, which we are committed to delivering from 2020 to ensure we deliver more of what matters to our customers. More information on this can be found in our Pledges, incentives and bills Chapter. Below we summarise the performance commitments related to enhancing our wholesale services. Together they will enable us to deliver our strategy for long-term sustainable water supplies.

[1] *This main will be completed in AMP6, but benefit is secured via the Bough Beech upgrade work planned for 2020-25*

High quality water all day, every day

We will…	Where we are now…	This means that by 2025…
Maintain our above industry upper quartile position and aim to have the fewest minutes lost per customer for interruptions longer than three hours	3.2 minutes lost per customer per year	We will reduce to an average of 2.1 minutes lost per customer per year
Continue our strong performance in reducing the number of mains that burst	61.5 bursts per 1,000km of water mains per year	We will reduce to 57.8 bursts per 1,000km of water mains per year
Maintain our industry leading position of having the fewest contacts from customers about their water quality	0.5 contacts per 1,000 people per year	We will receive no more than 0.5 contacts per 1,000 people per year about the taste, smell or appearance of their water
Continue to produce amongst the highest quality of water in the industry	Compliance Risk Index score of 0.228	We will keep water quality at industry leading levels, as measured by the Drinking Water Inspectorate's new Compliance Risk Index
Maintain a high level of confidence in our ability to provide customers with a reliable supply of high quality water	90% of our customers are confident in us	Taking everything into account, 90% of our customers will be confident in us

A service that is fit now and for the future

We will…	Where we are now…	This means that by 2025…
Ensure that no customer is impacted by a severe drought	There were no restrictions to water use despite lower than average rainfall in the last year	Nobody we serve will be subjected to restrictions such as standpipes or water rationing during a one in 200-year drought
Increase the connectivity of our infrastructure to ensure that every customer can be supplied by more than one source	36% of properties can be supplied by more than one treatment works (on track for 56% by 2020)	100% of properties can be supplied by more than one water treatment works
Reduce the likelihood of unplanned outages at our treatment works	Unplanned outage as a proportion of our dry year peak week production capacity is 4.6%	An unplanned outage will only amount to 2.3% of our total peak week production capacity
Further reduce our already comparatively low level of leakage	Leakage is currently 24.2 Ml/day	We will reduce the amount of water that is lost each day by a further 15% from 24 Ml/day in 2019/20

Excellent service, whenever and however you need it

We will…	Where we are now…	This means that by 2025…
Meet developers needs on time and to a high quality	We are working with Ofwat to trial a new approach to assessing satisfaction	We will be in the upper quartile of the industry league table

Support a thriving environment we can all rely upon

We will…	Where we are now…	This means that by 2025…
Help customers reduce how much water they use	Per capita consumption is currently 147 litres per day	We will reduce the average amount of water used by each person by 7.3% from 145 litres per day in 2019/20
Generate and use renewable energy to limit the greenhouse gases we create from our operations	376kg of CO_2 per million litres of water put into supply	We will invest in and purchase renewable energy to limit our emissions to 55kg of CO_2 per million litres of water put into supply
Strive to never cause severe pollution to land, air or water	No severe pollution incidents	We will not cause any category one or two pollution incidents
Reduce the amount of water we abstract from more environmentally sensitive water sources when river flows are low	We are licenced to abstract water by the Environment Agency and there are currently no sustainability reduction requirements in place	We will limit abstraction from two chalk boreholes to an average of seven megalitres per day and a peak of 12 megalitres per day when groundwater is more than 43 metres below ground level
Strive to make the land we own more attractive to a variety of plant and animal life	No sites currently achieve the Biodiversity Benchmark	We will achieve and maintain The Wildlife Trusts' Biodiversity Benchmark at three of our sites
Deliver the requirements of the Environment Agency's Water Industry National Environment Programme (WINEP)	None completed but 14 underway	We will have delivered 24 river-based investigation or improvement programmes

Our strategy to deliver resilient and sustainable water supplies

Our long-term wholesale services strategy will be delivered through activity in four key areas:

- Quality – supplying high quality water
- Resources – ensuring there is enough water available for the future
- Assets – operating efficient and resilient infrastructure
- Environment – protecting and enhancing the environment we rely upon.

These four areas are supported by our wider innovation, resilience and environmental strategies, more detail on which can be found in the relevant chapters of this plan.

Quality – supplying high quality water

Our target is always to achieve 100% compliance with the Drinking Water Inspectorate's (DWI) independent quality measures and this will continue to be so in the future. In the current period the key metric we have used to measure our overall drinking water quality is Mean Zonal Compliance (MZC).

The new Compliance Risk Index (CRI) which will be the primary measure of water quality from 2020, is based on a number of measures that reflect not only the quality of the water but the nature and impact of any shortfall in quality and an assessment of our response. There is therefore potential for greater fluctuation in our performance, some of which will be influenced by factors beyond our control.

For the three years that the new measure has been applied and reported to the DWI, we have achieved industry leading performance with scores less than 0.5 in each year against an industry average of 6.3. Our target is to continue this strong performance and remain in the upper quartile of the industry consistently between 2020 and 2025, and beyond.

As a result of our strong historic record we are not requesting additional investment for any water quality schemes and will manage our performance through base expenditure and some additional investment to deliver the Water Industry National Environment Programme requirements. See Appendix A4.3 - DWI statement for Customer Scrutiny Panel for confirmation from the DWI that we have not sought support for any schemes. There is however some uncertainty around future regulations relating to water quality that could have a significant impact on the costs we face. We discuss this further in the section below on drivers of cost changes from 2020 to 2025.

Our customers have consistently highlighted the importance of their water tasting, smelling and looking great. We are already leading the industry with the lowest levels of contact about issues with the taste, smell and appearance of water and are committed to making sure it stays this way.

We will also continue our focus on improving raw water quality and protecting it from pollutants, particularly metaldehyde. Working in partnership with farmers and other key stakeholders is essential to achieving this.

Resources – ensuring there is enough water available for the future

Securing long-term water resources requires a twin-track approach to supply and demand. Our revised draft Water Resources Management Plan (WRMP) is the statutory vehicle by which we model our future water resource needs and identify the best value options to reduce any projected deficit. In doing so, it considers the impacts on demand – from, for example, expected changes to population and customer behaviour – and the impact on supply – from, for example, the impact of climate change and any future reductions to abstraction licences.

To ensure we are taking a long-term view, our latest WRMP was extended from a 25 year to a 60-year outlook. The actions outlined in the revised draft WRMP mean that we plan to maintain water supplies, without serious restrictions, during a one in 200-year severe drought event over the 60-year horizon.

Our revised draft WRMP shows that if we do nothing, we do not experience a supply-demand deficit until 2047/48. However, our strategy to deliver increased long-term resilience is to progress a range of demand-side measures from 2020. This is something that our customers clearly expect. Because of this additional demand-side activity, at no point during the 60-year period do we go into a deficit.

Our long-term ambition is to reduce leakage by at least 50% by 2045 and usage to 118 litres per person per day by 2050, in-line with the recommendations of the National Infrastructure Commission (NIC). The NIC recommendations are based on a needs assessment that considered the wider impact of drought and potential cost of failure and identified the level of future resilience needed and the interventions that would deliver this. We have therefore built an additional level of resilience into our WRMP by fast-tracking demand-side activity to support delivery of the NIC's recommendations.

In addition, we will continue to investigate potential supply-side options that could be progressed in the future. The revised draft WRMP modelling does not identify the need for any new water resources during the period, because of our enhanced demand-side activity. However, the future is uncertain, so we will investigate the potential to enhance some of our existing groundwater sources, to establish whether we can abstract more from them should we need to, during times of the year when this won't impact the environment.

Critical to delivering long-term resilient supplies to customers while protecting the environment is the work of the Water Resources in the South East (WRSE) group. The development of the latest WRSE strategy has seen significantly more co-ordination between member companies both at strategic and technical levels than ever before. Its regional strategy identifies the strategic resources and transfers that provide the best value regional solutions under a range of future scenarios. It identifies a bulk supply from our Bough Beech Treatment Works to South East Water, for later in the WRMP planning period.

We are committed to continuing our collaborative work for the benefit of customers and the environment. The WRSE group has an ambitious agenda to enhance the management of water resources at a regional level. The current WRMP process has successfully increased resilience over time, supporting population growth and environmental enhancement across the region. However, this process alone does not deliver the resilience to drought now expected nor does it recognise the true value of water to society and the economy.

The parameters we are planning for have changed and regional groups can address this. By working together through the WRSE we can promote greater innovation, make efficiencies through joint technical and modelling work and identify the optimum regional schemes that will deliver greater resilience. Additional funds are included in our plan so WRSE can progress this enhanced agenda with the objective of developing a single regional water resource management plan for the region, a trading hub for the south east to promote the water resources market, further increase resilience to extreme droughts and support the direction of travel as set out in the Government's 25 Year Environment Plan and the recommendations of the NIC. It will also continue to work collaboratively with other regional groups under the national framework being developed by the Environment Agency.

Our Bid Assessment Framework (see Appendix A4.4 – Bid Assessment Framework) offers a way for potential partners to contribute to balancing supply and demand in our supply area and across the wider south east region.

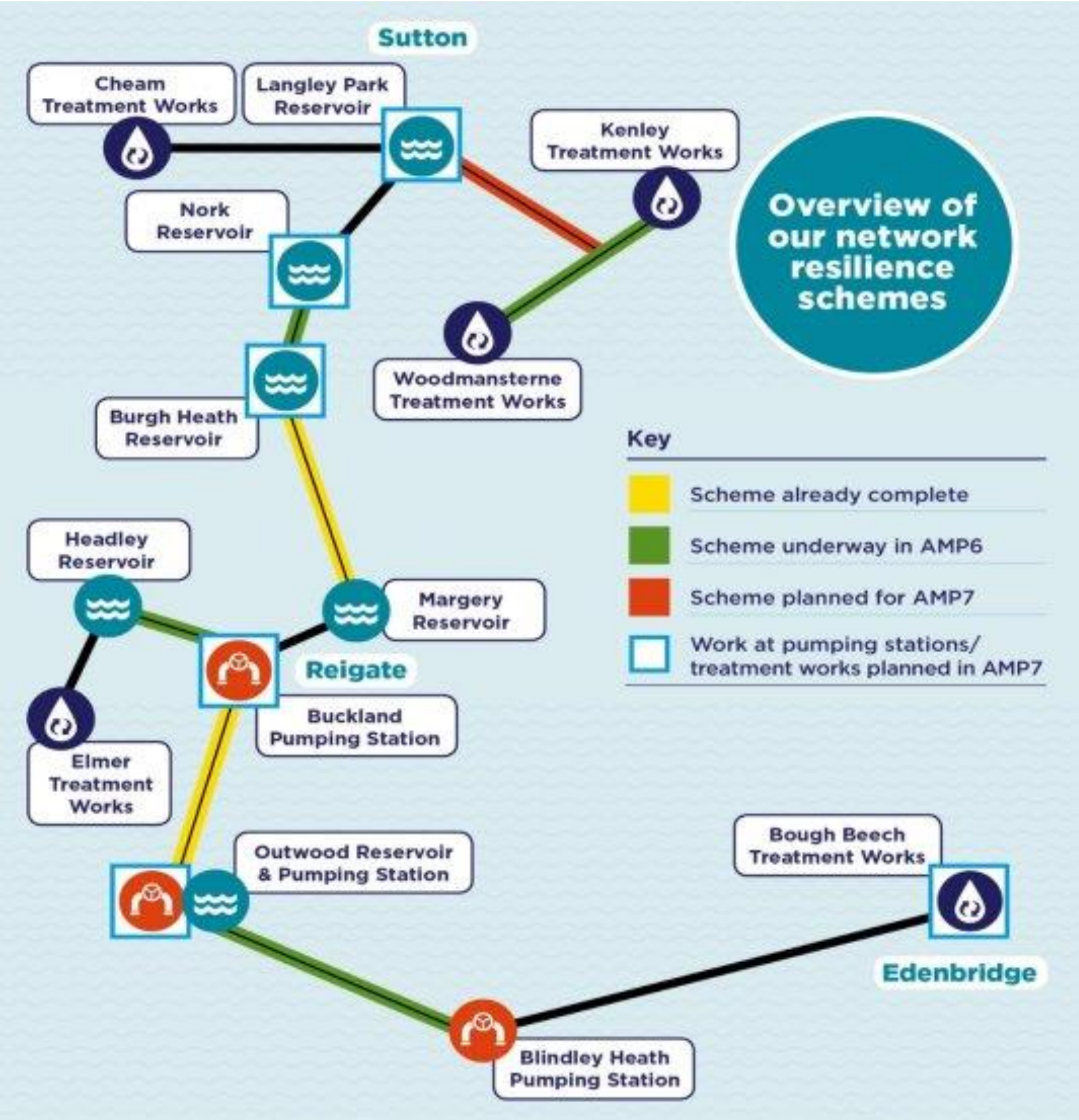
Assets – operating efficient and resilient infrastructure

Our distribution network and assets have achieved stable serviceability for the last 20 years because of well targeted maintenance and investment.

Our strategy over the last ten years has been to deliver a programme of network enhancements to improve the connectivity of our network (as detailed above) so our service is more resilient to short and medium-term events, such as the March 2018 freeze/thaw. It will culminate by 2025 with additional capacity created at our Bough Beech Treatment Works and upgrades to key pumping stations, enabling us to supply 100% of our customers from more than one water treatment works, enhancing the resilience of supply to both asset failures and drought conditions. It supports our drought management activity by strengthening the link between the north and south of our area by enabling us to move water around to optimise the management of our sources as a potential drought develops. The work on our 'water grid' is also important for the future should we receive or provide more water from or to our neighbouring companies.

The three phases of our resilience programme are shown on the map below.

Figure 2: Resilience programme map



Increasing our understanding and the intelligence of our network underpins our asset strategy. We have over the years implemented much closer monitoring and increased understanding of our network largely through the use of District Meter Areas (DMAs), as set out in the Innovation Chapter. This has helped us deliver our strong network performance. Our future work is focused on using innovative techniques to better understand our network. This includes real-time monitoring and the use of smart technology, assessment of asset condition using no-dig methods that avoid customer disruption, which will enable us to better target maintenance and investment, and increased automation so response times reduce. The aim of this is to address issues before they impact on customers, improving the service they receive.

The logic extends to our above-ground assets too. We are progressing activity that will enhance our existing approach by embracing condition-based assessment to better predict failures before they cause outages at our treatment works. This will complement our ongoing work to replace assets that are unreliable or at the end of their useful life with new, more efficient equipment.

We are also focused on making sure we provide a high quality and timely service to those looking to connect to the network, therefore supporting housing development across the south east. We'll work with developers to ensure our network can accommodate future growth in a timely manner and provide a great service.

Environment – protecting and enhancing the environment we rely upon

A healthy environment is critical to our business and is valued by our customers. We impact the environment everyday through the energy we use, the emissions we create and the water that we take and return through the treatment process.

Our Environment Chapter explains how we are taking a twin-track approach of protecting and enhancing the environment both now and in the future through:

- Minimising the impact that we and our customers have on it
- Actively improving it in areas of benefit to our customers.

This strategy will primarily be delivered through our wholesale services activity that is focused on leaving more water in the environment, reducing energy use, enhancing biodiversity and helping protect the catchments we operate within.

There are clear links between delivering our environment strategy and our other wholesale service commitments highlighting the dependency we have on the environment and the importance of increasing its resilience in the long term.

Delivering our pledges for 2020 to 2025

On the following pages we summarise how we will deliver our wholesale performance commitments under each of the pledges introduced earlier in this chapter.

More information about how we are investing to deliver a number of these commitments is included in the section that follows on our enhancement programmes.

High quality water all day, every day

Supply interruptions – we will maintain our above industry upper quartile position and aim to have the fewest minutes lost per customer for interruptions longer than three hours
Why are we focusing on this?
Customers have told us that interruptions are a real inconvenience to them, especially if

they get no warning, and have demonstrated a willingness to pay more for us to improve our performance. It demonstrates the resilience of our service to extreme events and the health of our network, which is the focus of our strategy.
How will we achieve our commitment?
We will: • Continue using innovative tools and techniques so repair times are quicker – such as applying technology that allows installation of new valves without the need to isolate the main • Install additional sensors and logging equipment across our water grid and build our analytical capability – creating a more intelligent network that can better predict interruptions • Increase our planned preventative maintenance using our enhanced no-dig mains assessment • Deploy temporary measures, such as overland equipment, to supply customers while more complicated repairs are carried out and innovate to find quicker ways to do this • Improve our processes so response times to site are quicker if an interruption occurs.
By 2025:
We will reduce supply interruptions to an average of 2.1 minutes lost per customer, per year

Mains bursts – continue our strong performance in reducing the number of mains that burst
Why are we focusing on this?
Mains bursts are a strong measure of the health of our assets which is important to delivering a number of our commitments. Customers expect us to invest in our assets and highlight mains replacement as a key area both to reduce interruptions and protect resources – more than half of customers felt the rate of pipe replacement should increase. They also highlight the wider disruption that burst mains can cause such as road closures and flooding.
How will we achieve our commitment?
We will: • Use innovative techniques to assess the condition of mains without the need to dig them up allowing us to target our mains replacement programme more accurately • Install additional sensors and logging equipment across our water grid and build our analytical capability – creating a more intelligent network that can better predict interruptions • Explore different types of materials and fittings to use in repairs and on new mains • Manage pressure through network calming measures to help prolong the life of our mains.
By 2025:
We will reduce to 57.8 bursts per 1,000km of water mains, per year.

Customer concerns about their water – maintain our industry leading position of having the fewest contacts from customers about their water quality
Why are we focusing on this?
Customers expect water to be high quality and are least willing to accept situations leading to water quality issues, including when water is discoloured, tastes or smells unpleasant. We don't have full control of all the causes of contacts – 15% are from unauthorised access to our network – but where our own activity is the cause we know we can do more.
How will we achieve our commitment?
We will: • Improve our network operating procedures to minimise unnecessary network instability through collaboration and sharing of best practice with other water companies • Educate and monitor third parties that access our network, such as the fire service and standpipe users, so that they know the correct processes to follow to minimise the impact to other customers • Increase vigilance of unauthorised water access • Help customers to understand and manage factors within the home that have potential to impact on the taste, smell and appearance of their water • Proactively talking to customers when we are carrying out activity such as repairing leaks and bursts, which could temporarily impact on the taste, smell and appearance of their water.
By 2025:
We will receive no more than 0.5 contacts per 1,000 people about the taste, smell or appearance of their water, per year.

Water quality – we will continue to produce amongst the highest quality water in the industry
Why are we focusing on this?
Customers expect high quality and safe drinking water – there can be no compromises to public health. The Drinking Water Inspectorate (DWI) monitors our compliance with water quality regulations.
How will we achieve our commitment?
We will: • Embed our Drinking Water Safety Plans across all our operational areas to manage risks from source to tap • Enhance our catchment management activities to protect our raw water sources from pollutants and in particular metaldehyde • Enhance our lead replacement strategy • Prioritise maintenance and renewal at treatment works, where there is a greater risk to water quality, and operate in a way that controls known risks • Invest more in training of our operational employees so our assets are operated more effectively, and they respond appropriately to unexpected events • Continue to do more sampling – over and above what is required for compliance – using our expert lab to continuously monitor quality • Provide engaging material that seeks to inform and educate our customers about

water quality.
By 2025:
We will keep water quality at industry leading levels, as measured by the DWI's new Compliance Risk Index. **Customer confidence –** maintain a high level of confidence in our ability to provide customers with a reliable supply of high quality water
Why are we focusing on this?
Confidence is a judgement formed from perception and experience. Our customers have a high level of satisfaction in the service we provide and we consider it is also important to check they are confident in our ability to provide them with a reliable supply of high quality water.
How will we achieve our commitment?
We will: • Fix problems as quickly as possible and get it right first time, always • Do what we say we'll do, in the time we say we'll do it • Have robust, customer-focused contingency plans to manage unexpected events • Keep customers and other stakeholders informed and be consistent across our communication channels • Be visible and accessible on the ground in areas of disruption, particularly with those in vulnerable circumstances • Provide compensation that is appropriate and timely • Share learning to make sure that best practice is identified and repeated.
By 2025:
Taking everything into account, 90% of our customers will be confident in us.

A service that is fit now and for the future

Risk of severe restrictions in a drought – ensure that no customer is impacted by a severe drought
Why are we focusing on this?
Customers expect us to deliver sustainable and resilient supplies now and in the future. Extreme restrictions to customers' supplies are unacceptable to them and would seriously impact society and the economy and therefore we are putting in place measures to limit their likelihood.
How will we achieve our commitment?
If there is a drought the drought management process requires us to take a range of actions, including staged restrictions to customers' water supplies – starting with non-essential use bans and in severe circumstances standpipes or water rationing. Our revised draft WRMP is based on not implementing such restrictions during a one in 200-year drought event and we will increase our resilience further through demand-side activity, this received strong support from customers. We will: • Reduce leakage by 15% by 2025 and by at least 50% by 2045 • Work with customers to reduce their usage by 7.3% by 2025 and by 19% to 118 litres per person per day by 2050 • Continue to invest in and maintain our treatment works so unplanned outage is

kept to a minimum • Take action to monitor and maintain the quality of raw water sources – to limit occasions where we cannot use the water available • Conclude our programme to build a more resilient network, specifically increasing the capacity of Bough Beech Treatment Works and developing our 'water grid' • Contribute to the ongoing work of regional plans for water management through the WRSE group • If required, follow our approved drought plan to mitigate the risk of restrictions.
By 2025:
Nobody we serve will be subjected to restrictions such as standpipes or water rationing during a one in 200-year drought.

Risk of supply failure – increase the connectivity of our infrastructure to ensure that every customer can be supplied by more than one source
Why are we focusing on this?
A reliable supply of water is a priority for customers. Loss of supply for longer than four days was seen as unacceptable. Customers expressed strong willingness to pay for investment to reduce the risk of loss of supply and supported our continuing work to develop an enhanced water grid.
How will we achieve our commitment?
We will increase the connectivity of our network and complete this programme of work by: • Constructing a new strategic water main between How Green and Langley Park service reservoirs so if Cheam Treatment Works is unavailable we can still supply customers • Increasing the capacity of Bough Beech Treatment Works from 50 to 70 Ml/day so more water can be treated and supplied to the north of our supply area • Increasing our pumping capacity and power supply to provide options to supply multiple areas.
By 2025:
100% of properties will be able to be supplied by more than one water treatment works.

Unplanned outages at treatment works – reduce the likelihood of unplanned outages at our treatment works
Why are we focusing on this?
Unplanned outages reduce the amount of water that is available to supply our customers so keeping them to a minimum is critical to ensure we are resilient to drought events.
How will we achieve our commitment?
We will: • Invest in our Godstone Treatment Works to replace process units at the end of their useful life which means we will no longer need to temporarily shut the site down for maintenance • Use condition-based assessment techniques to predict when assets require maintenance or are reaching the end of their usable life to target maintenance and investment more accurately, reducing failure rates • Increase the reliability of power supplies to our sites by further assessing options to work with local electricity network operators or improve our standby generation

facilities • Identify and rectify unnecessary constraints and interdependencies that exist but lead to temporary outages • Continue and improve employee training that helps them identify early signs of breakdown and outages.
By 2025:
An unplanned outage will only amount to 2.3% of our total peak week production capacity.

Leakage – further reduce our already comparatively low level of leakage
Why are we focusing on this?
Customers believe that current levels of leakage are too high and expect us to do more to reduce leakage levels. Our performance is amongst the best in the sector, but customers are willing to invest more to reduce it further.
How will we achieve our commitment?
We will: • Enhance our active leakage control activity – detecting and fixing leaks on both our network and on our customers' supply pipes • Extend the use of the pressure management of our network to maintain stable operation of the distribution network and supply assets • Deliver our programme of leakage-targeted water mains replacement – increasing the rate of overall replacement from 0.6% to 1% a year – using condition-based assessment to target the mains in the poorest condition • Work with our supply chain and others in the sector, including through the WRSE group, to share knowledge and develop more innovative solutions to deliver the step-change in performance required.
By 2025:
We will reduce the amount of water that is lost each day by a further 15%.

Excellent service, whenever and however you need it

Developer satisfaction – meet developers needs on time to a high quality
Why are we focusing on this?
We operate in an area of high housing growth. Forecasts suggest that between 2020 and 2025, 2,500 new properties will be built in our area each year, as well as redevelopment and extensions to existing properties. We know that these customers can become frustrated if the process does not run as quickly and smoothly as they expect. We therefore need to ensure that we keep these customers informed and provide them with the service they expect in a timely manner.
How will we achieve our commitment?
We will improve our service to developers by: • Delivering more intuitive, interactive platforms to allow self-serve of quotations for the services they require • Ensuring we provide transparent, coherent, accurate and efficient quotations for all jobs, along with clear information on any alternative approaches that may be available

- Improving the flow of information between us and the developer on progress – both ours and theirs – from the outset and throughout the project
- Collaborating with other water companies to explore the concept of introducing common service levels to support national or inter-regional developers
- Explore the opportunity to provide value-added services, such as water efficiency advice, during the build phase.

By 2025:

We will be in the upper quartile in the industry league table for the new D-MeX measure of developer satisfaction.

Support a thriving environment we can all rely upon

Usage – help customers reduce how much water they use

Why are we focusing on this?

Our customers recognise that their behaviour impacts on water supplies and the environment. They are willing to act to reduce usage but would like our help to do so. Most customers are supportive of metering but expect it to be supported with a range of water efficiency advice and education.

How will we achieve our commitment?

We will:

- Expand and accelerate our current metering programme so that by 2025, 90% of our customers are metered
- Encourage at least 10% of households to take, or convert to, a smart meter and increase this if the technology advances sufficiently to support a larger distribution
- Optimise our approach to meter installations by learning from current trials and learning from other companies that have made similar step-changes in the past
- Explore the use of new technology that would allow more complex supply arrangements, such as shared supplies, to be metered
- Deliver an enhanced water efficiency programme over the five-year period by:
    - Increasing our home visits and provision of water efficient products from 5,000 to 37,500
    - Increasing the distribution of water efficiency packs from 5,000 to 22,500
    - Encouraging 40,000 customers to participate in targeted behaviour change initiatives – such as our town-wide 'TapChat Sutton' campaign with environmental campaigning charity Hubbub
    - Reaching 75,000 customers through campaigns and events
    - Enhancing our environmental education programme and development of a new education centre at our Elmer Treatment Works
    - Working with water retailers to help business customers reduce their consumption.

By 2025:

We will reduce the average amount of water used by each person (per capita consumption) by 7.3%.

Greenhouse gas emissions – generate and use renewable energy to limit the greenhouse gases we create from our operations
Why are we focusing on this?
Customers care about their local environment. Abstracting, treating and distributing water requires significant energy use. We recognise our role in helping to improve our local environment by reducing our energy use and choosing renewable sources where efficient to do so.
How will we achieve our commitment?
We will: • Continue to only purchase electricity that is backed by Renewable Energy Guarantee of Origin certificates (REGOs) following our switch to renewables in June 2018 • Improve the energy efficiency of our operations by around 9% from current levels by replacing old and inefficient pumps and other equipment, and delivering opportunities to improve the control of our assets • Explore opportunities for renewable energy generation and battery storage on our land and buildings to reduce our emissions and costs and provide additional resilience • Phase out diesel use for our standby generators for anything other than emergency generation and explore converting some of our generators to bio-diesel • Introduce electric vehicles into our fleet as they become technically and economically viable.
By 2025:
We will invest in and purchase renewable energy to limit our emissions to 55kg of CO_2 per million litres of water put into supply.

Pollution incidents – strive to never cause severe pollution to land, air or water
Why are we focusing on this?
No pollution incidents are acceptable and so we are committed to maintaining our strong performance which has meant no category 1 or 2 incidents for over ten years.
How will we achieve our commitment?
We will: • Maintain our compliance with ISO 14001 environmental management system – gained in 2015 and renewed in 2018 • Take action to reduce the probability of pollution-causing incidents such as burst mains and improve our response to such incidents to minimize their impact • Continue to thoroughly investigate all more minor pollution incidents and near-misses to understand root causes and learn from them • Work with stakeholders such as the Environment Agency and environmental groups to find additional ways of reporting and mitigating the impact of more minor category 3 pollution incidents.
By 2025:
We will not cause any category 1 or 2 pollution incidents (as measured by the Environment Agency).

Abstraction Incentive Mechanism (AIM) – reduce the amount of water we abstract from more environmentally sensitive water sources when river flows are low
Why are we focusing on this?
Customers understand that they live in a water-stressed area and want to do their bit to help maintain supplies for the future. But they also expect action from us including making sure we are focused on only taking the amount of water needed from the environment.
How will we achieve our commitment?

We will limit abstractions at two sensitive sites by:
• Adopting a target of a maximum abstraction from both sources when groundwater levels are low (43m below ground level) of:
  ○ An average of 7Ml/day
  ○ A peak of 12 Ml/day
• Replacing water from these sources with water from other boreholes feeding our Cheam Treatment Works which have less impact on the environment, while continuing to augment the River Wandle.
 	
We are committed to abstracting sustainably from the environment, particularly where our activity influences local chalk streams. Our current abstraction activities don't meet the criteria set out for adoption of an AIM scheme. However, we want to embrace the concept of AIM so we can assess whether, by changing our operational approach, we can enhance what we already do to protect these precious chalk streams. Through engagement with the EA and South East Rivers Trust we have agreed to test an approach on our Oaks and Woodcote boreholes. These sites impact base flow on the River Wandle, which we already augment to mitigate the impact of our abstraction. This approach will allow further assessment of whether reducing abstraction at certain times delivers additional benefits to the river.

By 2025:
We will limit abstraction from two chalk boreholes to an average of 7 megalitres per day and a peak of 12 megalitres per day when groundwater is more than 43 metres below ground level.

Improving land through biodiversity – strive to make the land we own more attractive to a variety of plant and animal life
Why are we focusing on this?
Customers value the natural environment and acting to increase biodiversity will improve the resilience of ecosystems. The Water Industry National Environment Programme (WINEP) requires water companies to consider land-based biodiversity actions. Improving biodiversity is also an objective of the Government's 25 Year Environment Plan.
How will we achieve our commitment?
We will use the external Biodiversity Benchmark accreditation to guide and measure our activity and seek to increase biodiversity by: • Collaborating with Kent and Sussex Wildlife Trusts and other local environmental groups to identify which sites best align with their objectives to create nature highways by maximising interconnectivity of biodiversity and environmental improvement schemes – expected to be Bough Beech, Elmer and Fetcham • Identifying through preparation, pre-assessment and initial assessment stages the interventions required to achieve and maintain the benchmark

- Carry out a range of project work and implement changes to our operational practices to add flora and fauna to the sites through new planting schemes, altering grounds maintenance and creating new habitats.

By 2025:

We will achieve and maintain The Wildlife Trust's Biodiversity Benchmark at three of our sites

Improving rivers through delivery of WINEP – deliver the requirements of the Water Industry National Improvement Programme (WINEP)

Why are we focusing on this?

The third release of the WINEP sets out the actions we must complete to meet our environmental obligations and the timescales for completion. Details of our WINEP3 obligations can be found in Appendix A9.1 - WISER report.

How will we achieve our commitment?

We will deliver WINEP3 by completing 24 actions or investigations:

- Eight water resource schemes, seven related to abstractions in the River Wandle and one in the Upper Darent river catchment
- Three company-wide schemes relating to invasive non-native species and biosecurity
- 13 water quality investigations or catchment schemes.

This will be done by:

- Collaborating with Thames Water and South East Rivers Trust on a range of projects including removal of weirs from the River Wandle to help re-naturalise the river and improve fish passage
- Delivering catchment investigations and schemes aimed at addressing the challenges of pesticides at Bough Beech and the rising trend of high concentrations of nitrates, solvents, ammonia or microbiological challenge in some groundwater sources
- Delivering a programme to investigate the potential for, and address as required, risks from invasive non-native species (INNS)
- Encouraging the substitution of metaldehyde with alternative substances through engagement with the farming community
- Carrying out river restoration work in the Hogsmill river catchment, a tributary of the River Thames, which we expect to feature in the next release of WINEP.

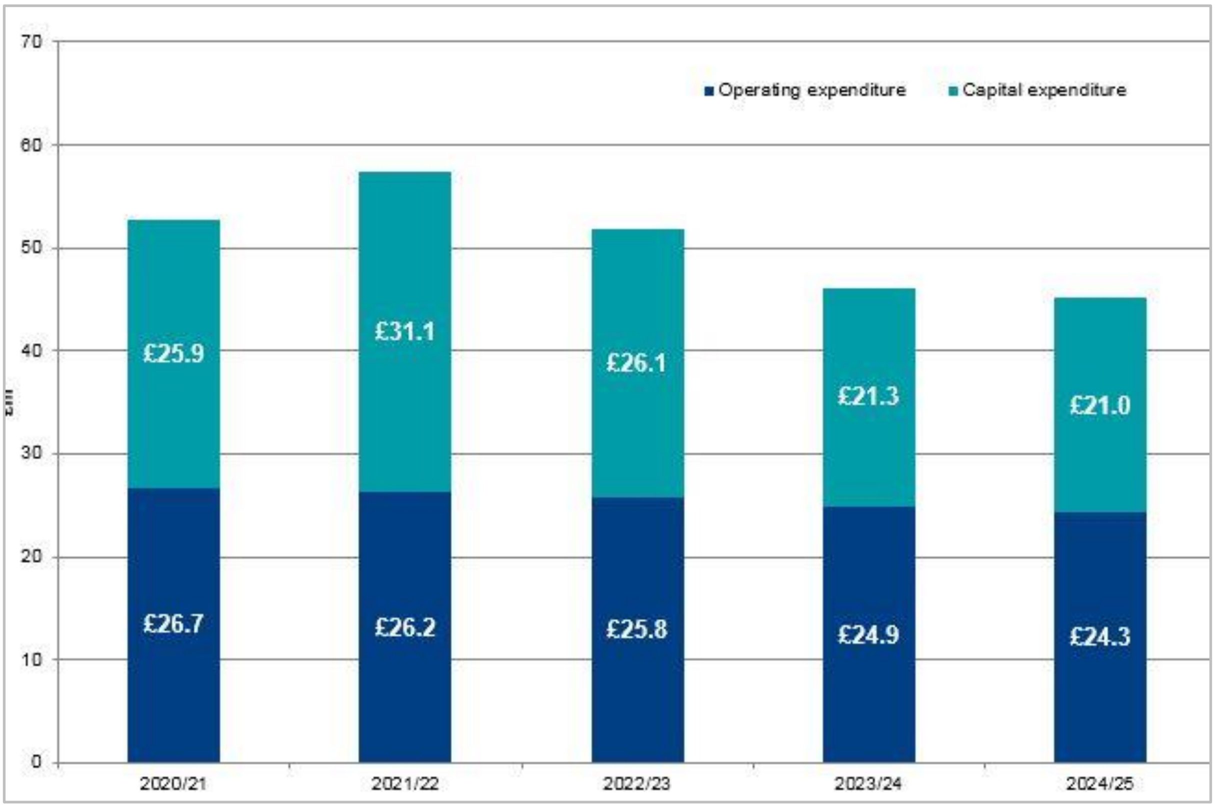
By 2025:

We will have delivered 24 river-based investigation or improvement programmes.

Section two: wholesale services costs and efficiencies

Our wholesale services plan will be delivered for £253.3m over 2020 to 2025 (before the impact of inflation). This is an investment of, on average, £50.7m each year in both operational improvements and new infrastructure and assets. The following chart summarises the annual investment we will make and how it is split between operating and capital expenditure.

Figure 3: Wholesale expenditure by year



Our costs today

We aim to deliver what matters to our customers at a price they can afford. As a small company we do not have the buying power of larger organisations as we do not need to purchase goods and services in the volumes required by larger water companies. We do however offset this natural disadvantage through agility, building strong relationships with third party suppliers and working collaboratively wherever possible.

At the last price control review (PR14) our wholesale costs were assessed as higher than would be expected based on Ofwat's assessment. Since 2015 we have been focused on finding new and more efficient ways of delivering the service we committed to in the PR14 Final Determination. Some of the key initiatives to improve efficiency in the last three years have been:

- Securing a competitive price for electricity, our second single biggest cost after people
- Signing new partnership contracts with some of our principal third-party suppliers to ensure cost effective project delivery and the sharing of risk and return. This includes a whole new way of working with Clancy Docwra (for mains renewals and extensions, network repair and maintenance, including leakage repairs, and meter

installation) and Atkins (engineering & environmental consultancy) involving integrated collaborative working teams within the same office and forward-looking reviews of planned projects

- Increased focus on innovation through culture and collaboration including the appointment of a dedicated innovation manager and the enhancement of awards and recognition for innovations from all employees
- Working with Portsmouth Water through our 'Collaborate to Innovate' programme to increase our buying power as two similarly sized, but relatively small water companies
- Adoption of the latest technology including increased use of mobile technology for field-based employees to enable real-time exchange of information on the location of jobs, progress of work, and meter reading activity.

The results have been encouraging and are starting to be seen in our totex performance against the PR14 Final Determination allowances. Whilst our annual performance reports to date have attributed the cumulative underspend of £8.3m largely to phasing of capital investment, the latest view taken in our PR14 Reconciliation accompanying this Business Plan submission indicates that we anticipate a small (£1.8m) saving on our overall totex allowance.

Our primary focus, however, has been on the efficiency challenges for 2020 to 2025 that have been so strongly signalled over recent years. We have therefore developed a two-year transformation programme designed to deliver sustainable long-term efficiencies across the business. Delivery of this programme by 2020 is key to driving the efficiencies we have included in our plan explained below.

Drivers of cost changes from 2020 to 2025

There are a number of factors driving the year-on-year changes in expenditure shown in Figure 3 above. We will be delivering more through the pledges and performance commitments we will deliver. But, we will do this for less and have assumed efficiencies across all activities. We will also face external, and uncontrollable pressure on our costs. There are also some potential cost increases that we have not taken account of but consider merit consideration in terms of the uncertainty, and associated risk, that we face. These factors are explained in turn below.

Enhancing our service

We will need to make investment to deliver our pledges and each performance commitment we are making. Some will be delivered through business as usual ('base') expenditure while others require targeted investment. We will also invest to enhance our network to accommodate growth from new housing.

In total our enhancement programme accounts for a fifth of the planned total expenditure over 2020 to 2025.

Table 1: Enhancement expenditure

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Operating	1.515	1.557	1.600	1.642	1.684	7.998
Capital	10.714	14.188	10.919	9.015	8.943	53.779
Total expenditure	12.229	15.745	12.519	10.657	10.627	61.777

The majority of this expenditure, £60.8m, is related to water network plus activity with only a small amount of enhancement expenditure for delivering part of the WINEP requirements allocated to water resources.

Our enhancement programme is split into six areas of activity. More detail on each can be found in the section on our enhancement programmes later in this chapter.

Table 2: Enhancement expenditure by activity

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Resilience	1.643	5.110	1.923	0.096	0.096	8.868
Leakage reduction	3.255	3.449	3.514	3.580	3.645	17.443
Reducing water use	4.832	4.657	4.559	4.465	4.376	22.889
Delivering WINEP	0.308	0.302	0.296	0.289	0.283	1.478
Lead replacement	0.344	0.344	0.344	0.344	0.344	1.720
Supporting house building	1.847	1.883	1.883	1.883	1.883	9.379
Total expenditure	12.229	15.745	12.519	10.657	10.627	61.777

Supporting house building is included as enhancement expenditure but is paid for by developers rather than customers through water charges.

Efficiencies

In total, £18.7m of efficiencies are included in our expenditure forecasts – £1.4m on water resources activity and £17.3m on water network plus activity. That's 7% of efficiency savings.

We are in the process of delivering our two-year transformation programme. Through the programme we are committing £2.3m over 2018/19 and 2019/20. This will deliver change across the business – on wholesale, retail and support services – with the aim of driving transformation to the customer experience and delivering sustainable long-term efficiencies. We have ring-fenced this funding as we consider that spending now, within the allowances that were provided in the PR14 Final Determination, is the right way to deliver our vision of service excellence and long-term efficiencies. The programme is structured around individual change projects with identified benefits. The impact on expenditure will crystallise from 2020.

The efficiencies driven from this programme, as well as the ongoing efficiencies that might be expected of even the most efficient business ('frontier efficiency') have been accounted for in the costs of delivering our wholesale Business Plan. We have confidence that our targeted efficiencies are achievable and sustainable. It includes:

- A focus on efficient energy use and purchasing efficiency guided by our Energy Strategy Committee and overseen on a day to day basis by our energy and carbon manager to deliver cost savings and mitigate the anticipated impact of power price changes
- The continuation of our roll-out of mobile technology to all field-based employees, both through systemisation of treatment works operation and maintenance activities and the deployment of the One-Serve application that gives full line-of sight on network operations to both employees and contractors carrying out the work and office-based staff who are planning work and engaging with customers. This will be extended to planned and reactive maintenance work

- A programme designed to reduce use of chemicals in our treatment processes, through a risk-based approach to optimisation of each stage in the water treatment process. This is being delivered using a dedicated in-house resource and is particularly important because of our high use of chemicals, a result of our unique obligation to soften water from our groundwater sources (see cost adjustment claim)

- Enhancing productivity and efficiency of our own workforce through reviews of our organisational structures, working patterns and the technology needed to support increased efficiency

- Continuing to get the most efficient balance between work delivered by our own employees and our long-term partners

- Ongoing re-tendering of major third-party goods and services is also a regular feature which has proved a reliable and effective way of achieving year-on-year savings on essential expenses, from the provision of IT or legal services, to the purchase of standard operational materials, such as clamps, covers and meter boxes

- Adopting a first-time reinstatement approach for highways work to reduce costs as well as reducing the impact on communities and the environment.

- Continuing our root and branch review of all licences we hold from the Environment Agency to see if there are any we can voluntarily surrender to benefit the environment and cut costs

- Carrying out a review of our fleet of vehicles and specialist mobile plant which is targeting whole-life cost savings.

Basis of efficiencies

Expenditure forecasts have been derived at a granular level by cost category. Efficiencies have been driven from a bottom up assessment of costs and an analysis of the scope to deliver efficiencies. This scope varies by activity.

For operating expenditure, we have assumed efficiencies across all types of expenditure. In 2020/21 expected efficiency savings are driven, primarily, from the two-year transformation programme currently in place. These efficiencies vary across the planned activity. From 2021/22 we are planning on the basis of delivering ongoing efficiencies of 2% a year, meaning that by 2024/25 we are ensuring that the same activity can be carried out with 8% less operating expenditure than in 2020/21.

We have also assumed efficiencies across our capital expenditure plans. The magnitude of the efficiency we plan to deliver varies across the planned activity. Efficiencies have been estimated based on the potential for different types of capital projects to be delivered more efficiently or where we consider that unit cost savings can be made. Our assumed efficiencies are materially greater than forecast inflation and will therefore deliver cost savings on both nominal and real terms. They are ambitious but deliverable.

In general, the following efficiency assumptions have been applied to capital project expenditure:

- 10% reduction in expenditure for general and support capex, e.g. IT, office equipment and vehicles

- 7.25% reduction in expenditure for activity on the network through further use of condition-based assessment (to better target activity) and innovation

- 2% reduction in expenditure for maintenance related expenditure where unit costs were already benchmarked against industry standard costs provided by third parties
- A further 5% reduction has then been applied to the resulting capital expenditure plan to account for the scope of productivity in delivery in the overall programme.

Input price pressure

Expenditure on wholesale services is made up of a mix of costs including people, plant and equipment, materials, power and chemicals. The largest cost we incur is on people which accounts for 43% of total wholesale expenditure. Power is our second highest single cost and makes up 11% of our total wholesale expenditure.

We have analysed the likely movement in general inflation, wages and power costs up to 2024/25 using independent forecasts. Wages are expected to grow at around 1% more per year than the CPIH measure of inflation. Power costs are more variable with an initial 12.6% rise above CPIH inflation but lower growth than CPIH inflation in 2022/23 and 2023/24. Other costs are expected to increase with inflation. In total, input price pressure, excluding the impact of general inflation which is accounted for in outturn prices paid through the regulatory framework, has added £1.6m to our expenditure forecasts in total over 2020 to 2025. These increases have been more than offset by efficiencies.

Further information on these forecasts can be found in Appendix A12.2 - Business Plan data table commentary (see App24a).

Other impacts on our costs

Impact of regional labour cost variations:

Our business is located in the south east of England. We know that employing people in this part of the country costs more than it does in other areas. The significant majority of roles that sit within the wholesale business cannot be performed outside of the area we operate in due to the nature of the work. We therefore consider that this should be taken into account when our expenditure plans are compared to other companies when considering the efficient cost at which we can deliver the service our customers expect.

Uncertainty:

We have built our plan around the priorities of our customers, Government and other stakeholders, adopting challenging but achievable costs for their delivery, and ensuring that we have adequate headroom to cope with severe but remote events having a financial impact. There are, however, two items that cannot be accommodated in this framework because the potential impact is material and beyond our control. They will, moreover, be relevant to all companies. We therefore propose that these be dealt with as Notified Items, enabling an adjustment to price limits if they were to crystallise before 2025.

1. Business Rates

A two-way Notified Item was included in PR14 Final Determinations for the impact of the new central non-domestic rating list in relation to water supply hereditaments expected to come into effect on 1 April 2017. This was on the basis that the impact could not be reasonably estimated at the time that Final Determinations were made, and the impact was beyond management control.

Experience with the implementation of the new rating list subsequently confirmed the importance of this protection. Even after representations against the original rating assessment, our rating for water supply assets increased by nearly 20% between 2016/17 and 2017/18 as a result of the revaluation. The initial assessment had twice the impact.

A new rating list will become effective in April 2021, which creates the same risks we faced at PR14. Moreover, a recent Valuation Tribunal decision on a 2005 rating list assessment has raised the possibility of the methodology for determining assessments changing. The Valuation Office has yet to provide a view on whether or not their methodology will change; and if so, how it will change. This uncertainty is beyond management control and is potentially greater than that faced at PR14. We therefore consider retaining the Notified Item in the form adopted for PR14 Final Determinations is an important safeguard against a major financial impact.

2. Lead standards

Our plan makes provision for doing more to address an expected reduction in the drinking water standard for lead (assuming the formal adoption of a proposed revised Drinking Water Directive) including continuing to support our customers in addressing lead in the pipes that are in their ownership.

In discussing this issue with the Drinking Water Inspectorate (DWI) at a meeting of our Customer Scrutiny Panel, the potential impact on companies' responsibilities for addressing lead arising from a change in Government policy on the ownership of supply pipes was highlighted by the DWI. This was not an issue we had either considered or consulted our customers on, and the potential impact, timing and implications remain highly uncertain. However, it does represent a risk for all companies over which management have no control. We therefore consider it should be treated in the same way as the uncertainty around business rates, except that the Notified Item should be one-way only, as the risk is primarily one arising from an increase in our obligations beyond our control.

Base costs and breakdown between activities

Our wholesale services costs are split between water resources and water networks plus activities.

Water resources

Water resources expenditure relates to activity to abstract water from rivers and underground sources.

Table 3: Water resources base expenditure

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Operating	3.749	3.678	3.610	3.425	3.327	17.789
Capital	0.924	1.060	0.876	0.843	0.867	4.570
Total expenditure	4.673	4.738	4.486	4.268	4.194	22.359

The majority of our water (85%) comes from groundwater sources so the water has to be pumped from below ground to our treatment works. The remaining 15% is pumped from Chiddingstone on the River Eden to our pumped storage reservoir, Bough Beech, before being treated. We also have an augmentation pumping station in Goatbridge on the River Wandle which helps augment the flow of water in this river.

We operate 74 boreholes across our supply area, with an average pumping head in excess of 180m, and the river abstraction noted above. These assets use a significant amount of power – 34% of water resources totex. We described above the expected change in power prices, based on independent forecasts, and the activity we are doing to minimise the impact of these costs for our customers.

The charges for abstraction that we pay to the Environment Agency are a material cost, accounting for 19% of water resources totex.

Capital expenditure accounts for 20% of water resources totex and is principally related to the maintenance and, if necessary, the replacement of the assets needed to abstract water. This includes pumps, control systems and instrumentation and physical infrastructure (e.g wellheads, buildings, valves, actuators). Activity between 2020 and 2025 has been planned based on modelling the asset health of existing assets by considering failure rate and consequence of that failure.

The data for this modelling work comes from our Agility Asset Management system which is a register of all our assets – totalling over 10,000 records – and details all work that has been carried out on those assets over the last ten years and purchase costs. A panel of business experts with site-specific knowledge carried out a review of the output of this system before it was used in the modelling work and made adjustments where there were gaps in the information held. Costs used in the modelling work were validated by independent cost consultants.

The modelling work relies on the 'Pioneer' investment planning optimisation system which considers failure modes, effects and criticality analysis. The approach used is similar to that used at the last two price reviews. Pioneer selects interventions (asset replacements or refurbishments) as required to achieve a stated level of serviceability at minimum cost. Serviceability consequences are assessed against a number of consequence levels for each indicator. This enables us to consider not only failures against regulatory limits but also less severe failures against operational limits. It also permits us to take account of the differing severity of consequences against indicators such as pollution incidents, for which the three Environment Agency categories are considered separately.

The balance of water resources operating expenditure is for the labour and materials necessary to maintain and operate the assets including the business support functions such as finance, regulation, HR and IT.

Water network plus

Water network plus expenditure relates to activity to treat and transport water from source to tap.

Table 4: Water network plus base expenditure

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Operating	21.462	21.011	20.583	19.795	19.245	102.096
Capital	15.470	17.123	15.528	12.655	12.250	73.026
Total expenditure	36.932	38.134	36.111	32.450	31.495	175.122

We operate a network of eight water treatment works, 24 pumping stations, 30 service reservoirs, five water towers, and 3,500 km of water mains. To make sure our water remains of the standard expected we carry out 120,000 tests each year on around 13,000 water samples at every point from source to tap. Base expenditure relates to the operation and maintenance of these assets.

Nearly 60% of water network plus totex in Table 4 is spent on transporting water from its source to our customers' taps. The remaining 40% is spent on treating water to the standards expected by our customers and to meet water quality regulations.

Operating expenditure:

Operating treatment and transportation assets is energy and labour intensive accounting for 54% of totex. We described above the expected change in power and labour prices, based on independent forecasts, and the activity we are doing to minimise the impact of these costs for our customers. The treatment process uses chemicals which account for a further 2% of totex.

The balance of operating expenditure is for the materials, plant and expertise of third-party providers that are necessary to maintain and operate our systems and assets. This includes the business support functions such as finance, regulation, HR and IT which account for around 17% of water network plus totex in total.

The management of leakage – by undertaking active leakage control (ALC) activities – accounts for around 10% of this totex in total and is included within this base operating expenditure.

Within our forecast base expenditure for 2020 to 2025 we have included provision for key external services. This includes technical support for the development of our next Water Resources Management Plan, including additional funding for regional planning through the WRSE group.

Capital expenditure:

Capital expenditure accounts for 42% of water network plus totex and is principally related to the maintenance and, if necessary, the replacement of the assets used to treat and transport water. This includes maintenance of treatment work assets, mains replacement and network improvements and meter replacements.

The approach taken to identifying expenditure to maintain serviceability of treatment works assets, pumping stations, service reservoirs and water towers is discussed above in relation to water resources base capital expenditure. Investment at each treatment works is associated with the replacement of assets that have reached the end of their useful life including instrumentation, control and automation (ICA), buildings and plant and standby generation equipment. At Godstone Treatment Works investment will facilitate the year-round running of the site, rather than extended, planned shutdowns each winter.

Mains replacement accounts for £22.8m and planned activity has been identified through detailed modelling work. This work has been driven by deterioration modelling performed in Pioneer with a modelling service provided by our consultants Servelec Technologies. The model highlights mains with the poorest integrity that should be replaced. This is achieved through the analysis of historical failure data which is used to develop failure modes with associated likelihood and consequence models, and intervention options. These were applied to the infrastructure assets using the Pioneer investment planning optimisation system. Pioneer selects interventions (mains replacement and communication pipe renewal) as required to maintain appropriate levels of serviceability at minimum cost. The adoption of innovative techniques focused on condition assessment of mains will help further improve the accuracy of mains replacement work.

The timely replacement of our infrastructure over successive years has been cited at various points within our plan as a key reason why we have been able to deliver resilient services to our customers – maintaining comparatively low levels of leakage and delivering strong performance on mains bursts and supply interruptions – over many years.

Targeted upgrades to our infrastructure have long been considered one of the best ways of managing and maintaining long-term asset health and resilience.

A further £4m of investment is associated with replacing assets in the network involved in monitoring and controlling flows and pressures on our trunk mains and within the DMAs.

Meter replacement expenditure is based on a continuation of our current approach to replace meters every 12 years.

Within our plan we also intend to spend:

- £2.5m on an upgrade to Bough Beech, discussed below under our enhancement programme as costs have been allocated between base and enhancement. Allocation of expenditure is based on the proportion of the capital project needed for the base level of the site through-put (50 Ml/d) against the enhancement flow of 70 Ml/d. A review of the asset base to be constructed as part of the scheme has been reviewed to identify the elements which fall into base and enhanced spend.

- £5.7m on replacement of filters at our Godstone Treatment Works to allow us to operate the site year-round without the need to shut-down each winter for essential planned preventative maintenance. The replacement of the filters will also provide additional protection against residual water quality risks at the site.

- £1.8m on replacement of lead pipes, discussed below, under our enhancement programme as costs have been allocated between base and enhancement. Expenditure has been allocated based on the forecast activity levels for our current level of service versus the enhanced service that will be in place from 2020.

- £0.3m on initial work on the replacement of filters at our Kenley Treatment Works with the majority of the expenditure planned for post 2025

Cost adjustment claim – water softening

We are unique amongst appointed companies in England and Wales in having statutory obligations to partially soften water from our groundwater sources. These obligations date from 1862 (the Caterham Spring Water Company Act) and 1903 (Sutton District Waterworks Act as amended in 1983).
Because we are the only company to have such obligations we are requesting that Ofwat continues to take account of this company specific requirement when it sets efficient cost allowances for the period 2020 to 2025. We are asking that Ofwat recognise the additional costs that we face by allowing the cost adjustment claim in full. It impacts both our base operating expenditure and our base capital investment. These costs are included within our water network plus activities summarised above. Full details of the claim can be found in Appendix A4.1 - Softening cost adjustment claim.

Our enhancement programmes

Resilience

By 2025 we plan to have completed our programme to improve resilience of supplies to all our customers. This programme will result in us being able to supply all our customers from more than one treatment works. This is an enhancement as it increases the proportion of customers that can be supplied from more than one works from 56% (in 2019/20) to 100%. The full cost of the programme is £8.9m which is broken down as follows.

Table 5: Resilience enhancement expenditure by activity

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Bough Beech upgrade	1.547	1.547	-	-	-	3.094
Pumping station upgrades	-	2.542	0.902	-	-	3.444
Network enhancements	0.096	1.021	1.021	0.096	0.096	2.330
Resilience totex	**1.643**	**5.110**	**1.923**	**0.096**	**0.096**	**8.868**

Need for investment:

Once completed, these works will provide a far higher level of resilience than that provided to our customers at any time in our history. Resilience is a key priority for our customers, Government and other stakeholders. Reducing interruptions to supply is one of the main priorities for our customers and they support improving resilience to address this – as seen in the customer engagement carried out for this plan and for previous plans. More information on this is available in our Engagement Chapter. We intend to complete the programme of work started in 2010 by 2025.

This investment also provides additional benefits to drought management and management of abstraction at times when water quality may be low from some sources. Full interconnectivity of our 'water grid' will allow us to optimise where we abstract, treat, and supply water from – not only based on its availability, but also its environmental impact, and comparative cost.

Best option for customers:

Our intention is that no customer will need to rely on a second source of water and our commitment to reducing unplanned outages confirms this. Nonetheless, we consider that additional resilience is important, and the investment is supported by customers. We therefore ruled out the 'do nothing' approach early in the process.

We have different options available to us to provide a second supply to all our customers. We have updated the modelling work conducted for previous plans using the latest information we have available to decide on the most efficient approach. This has taken account of some of the enhancements we have made to schemes currently being undertaken, allowing us to reduce future scopes of work, and some of the key experiences gained in delivering these complex schemes.

Our modelling has confirmed the projects that are needed. There are three core activities needed to deliver the outcome – treatment works upgrade, pumping station upgrades and network enhancements. All of the expenditure relates to water network plus. The project and the resilience benefit it will deliver is summarised as follows:

Project	Activity	Resilience benefit
Bough Beech upgrade	Deliver phase 3 of the upgrade to increase capacity from 50 to 70 Ml/d	Allows Bough Beech to supply more areas in the north of the supply area making full use of our abstraction licence from the River Eden. Benefits include improved resilience to outages at multiple other treatment works and increased resilience to a groundwater drought by allowing us to make full use of our only river source.

Project	Activity	Resilience benefit
Pumping station upgrades	Increase pumping capacity, power supply and/or delivery options (e.g. valve configurations) to allow supply to multiple areas	Outwood pumping station: Allows for greater transfer of water from Bough Beech towards areas normally supplied by our other treatment works, notably Elmer or Cheam.
		Buckland pumping station: Allows Bough Beech water to be pumped to the north of the supply area normally supplied by Cheam and towards Leatherhead and Dorking, normally supplied by our Elmer Treatment Works. Buckland will become an important strategic pumping station with the added benefit of allowing us to manage the balance of river water compared to ground water to protect sources when needed.
		Langley Park pumping station: The scheme will enable us to transfer water from Cheam Treatment Works into areas normally supplied by either Woodmansterne or Kenley Treatment Works.
		Burgh Heath pumping station: The scheme allows onward pumping from Cheam or Woodmansterne towards areas of the network normally supplied by Elmer or Bough Beech Treatment Works.
Network enhancements	Construction of a new strategic treated water main from How Green to Langley Park service reservoir	The scheme gives us enhanced resilience to the area of our network supplied by Cheam Treatment Works. In the event of a Cheam outage the area could be supplied by a combination of water from Woodmansterne or Kenley Treatment Works.

In addition to this scope, and as a direct result of the ongoing fine-tuning of our resilience strategy at a zonal level, our modelling has also identified a range of further interventions to our network that will provide additional resilience benefits to specific reservoir zones. This represents a logical next step on the journey towards full network resilience providing customers with greater resilience to both losing treatment works and if we have an unplanned outage at a service reservoir. This is split into two areas of work:

- Installing additional strategic connections in the network to facilitate better movement of water in a supply emergency to provide zonal level resilience
- The reinforcement or replacement of mains assets to provide resilience to parts of the network which are currently at risk in the event of a single asset failure.

The additional projects identified by this work are summarised as follows:

Zone / Asset	Proposed activity
Burgh Heath zone	The installation of a cross connection allowing for the bypass of Burgh Heath Reservoir. The new connection shall enable the area to receive water throughout the day. Moreover, enabling an important pressure reduction within the reservoir area.
Effingham zone	The installation of a cross connection allowing for the bypass of the reservoir.

Zone / Asset	Proposed activity
Langley Park zone	Pressure Regulating Valve (PRV) on a cross connection to the outlet side of the reservoir as well as a connection to the inlet.
North Looe zone	The installation of cross connection enabling the isolation of the reservoir and bypassing the pump station.
Betchworth Tower	The installation of a cross connection to mitigate asset failure.
Dry Hill Service Reservoir	The installation of a cross connection to mitigate asset failure. Installation of Variable Speed Drives (VSD) at our Leatherhead pumping station to avoid the need to vent.
Gravelly Hill Tower	PRV on a cross connection to the outlet side of the tower as well as a connection to the inlet.
Robbing Gate Service Reservoir	The installation of a cross connection to mitigate asset failure.

Robustness and efficiency of cost:

The costs proposed for these scopes of work have been determined from a number of sources. To cost the strategic mains and cross-connections, we have used our incumbent suppliers' schedule of rates. We are currently partnered with J Murphy & Sons on a multi-AMP framework to deliver all the mains related work under our resilience strategy. We have worked with them to undertake a study to determine the best routes for the proposed resilience mains, using their expert knowledge and scheduled rates to derive a cost that we have high confidence in.

With regards to the Bough Beech and pumping stations upgrades we have worked with our engineering partner, Atkins. Costs were obtained from suppliers and common costs for design and installation were applied. These values were then reviewed by cost consultants.

In the case of Bough Beech, the cost of the upgrade has been split between base and enhancement expenditure for the following proposed scope of works:

- New contact tank
- Uprating of GAC vessels, THM strippers and ammoniation equipment
- New raw water main.

The basis of the split is the proportion of the capital project deemed required to maintain the current through-put of 50 Ml/d against the resilience flow of 70 Ml/d.

Efficiencies, as explained in detail above, have been assumed on all expenditure.

Customer protection and affordability:

We are committed to completing our resilience strategy by 2025 and have proposed a financial performance commitment aligned with delivering it, with material penalties applied for underperformance, as set out in Chapter 2 of this plan.

The cost of this work – funded through capital investment – adds around £2.60 to the average annual bill.

Leakage reduction

We are committing to reducing leakage by 15% between 2020 to 2025. This is an enhancement to our existing leakage reduction programme which is targeting a 1% reduction over five years. The cost of the enhancement programme is £17.4m. This is in addition to base expenditure on active leakage control of £16.5 million bringing the total expenditure to reduce leakage to £33.9 million.

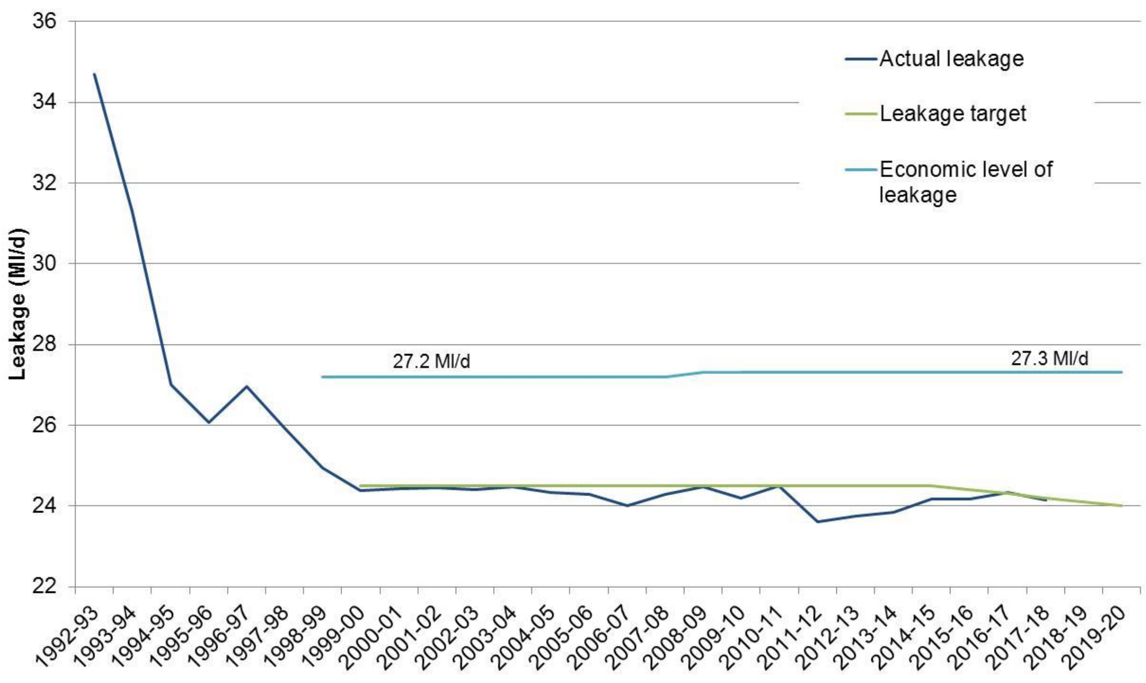
Table 6: Leakage expenditure by activity

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Mains replacement	2.515	2.644	2.644	2.644	2.644	13.091
Active leakage control	0.368	0.433	0.498	0.564	0.629	2.492
Pressure management	0.372	0.372	0.372	0.372	0.372	1.860
Enhancement totex	**3.255**	**3.449**	**3.514**	**3.580**	**3.645**	**17.443**
Base leakage activity	3.300	3.300	3.300	3.300	3.300	16.500
Leakage totex	**6.555**	**6.749**	**6.814**	**6.88**	**6.945**	**33.943**

Need for investment:

We have met our leakage targets ever since they were set in 1999. The level of leakage has effectively remained stable throughout most of the intervening period as seen in Figure 4 below. In fact, the biggest sustained reduction is required to be delivered within the current five-year period, reducing from 24.5 to 24.0 Ml/d.

Figure 4: Leakage over time



Reducing leakage, at a faster rate than seen in the past, is important for our broad range of stakeholders and our customers. We are asking our customers to reduce their usage, so it is only right that we should commit to reducing leaks from our network. Our overall aim is to reduce the water we take from the environment whether that is from reducing leaks or reducing usage.

Reducing leakage by 15% from 2020 to 2025 was supported by our customers. Our draft plan proposed a lesser reduction, but customers gave their support for going further. More information on this is available in Chapters 1 Customer Engagement and 2 Pledges, incentives and bills.

The reduction over 2020 to 2025 is set in the context of our long-term strategy to target further reductions of 15% in each five-year period from 2025. Therefore, achieving a 56% reduction in leakage by 2045.

Best option for customers:

We will deliver our planned leakage reduction through a multi-faceted approach which will enable us to pull multiple 'levers'. In assessing the best overall option for our customers, we have assessed the requirement to strike the right balance between cost and benefit, both in the short- and long-term. We have considered the different levers available to reduce usage and targeted an appropriate mix based on:

- Relative cost of options
- Sustainability of options and the long-term benefits they bring not just the short-term impact on leakage
- Minimising risk that could come from too great a reliance on one or two approaches.

This multi-faceted approach will help us to deliver leakage reductions in the most efficient and sustainable way for the long-term, whilst maintaining a focus on – and improving – the resilience of our network.

The three levers that we will use to reduce leakage are:

- Mains replacement – through the replacement of elements of our network which have the poorest integrity and a greater propensity to leak
- Active leakage control (ALC) activity – which is the detecting, finding and fixing of leaks both on our network and on customers' supply pipes
- Pressure management and control of our networks – to ensure that we maintain a stable operation across our distribution and supply assets.

We will achieve it by using the three levers of activity broadly equally – as supported by the modelling – which demonstrated the benefit of balancing reactive and proactive leakage reduction interventions on both current and future asset serviceability. This provides the optimal platform of cost, risk and sustainability for us and our customers, while still maintaining the flexibility to adapt.

Active leakage control	**Leakage targeted mains replacement**	**Enhanced pressure management**	**Total**
5% (1.2Mld)	5% (1.2Mld)	5% (1.2Mld)	15% (3.6Mld)

Each activity is explained in greater detail below. In practice, and as this level of leakage reduction has not been attempted since the 1990s, the exact balance of leakage reduction contributed by each lever may be different from that modelled and proposed in our plan. This is an approach underpinned by – and supportive of – the move to a totex basis for expenditure allowances. Throughout the five-year period, we will continually assess the relative efficiencies and longer-term benefits of each of these levers – and how much we are reliant upon them – in optimising our leakage reduction strategy.

Achieving the planned step-change in leakage reductions will also require us to collaborate and innovate, using the knowledge and expertise of others and sharing our own. We discuss this in more detail in Chapter 8 Innovation Chapter.

1. Active leakage control (ALC) activity:

ALC activity is the backbone of all leakage reduction programmes. It is a proven method of controlling leakage and is widely utilised across the industry. It is therefore an essential part of our strategy, but it is a reactive intervention and does not therefore deliver any longer-term integrity and resilience benefits to the network. Additionally, as ALC costs are classed as operating expenditure, every £1 spent is £1 on customers' bills.

We will continue to use ALC over the next five years and beyond but will make some fundamental changes to the approach we take to deliver better outcomes.

The first area of focus is reducing the cycle time from initial detection of a leak to its repair. On average throughout the course of a year, the duration from us first detecting a leak to completing a repair is around 12 days (longer for leaks on customers' pipes – see below). We will improve this by:

- Deploying additional and newly developed technology into our district metered areas (DMAs) – such as fixed noise loggers – to detect leaks more quickly. This will form part of our overall plan to create more intelligent networks
- Enhancing our analytical techniques and capability which will enable us to pick-up even the smallest of leaks immediately and aspire for this to be automated
- Delivering improvements to what is already an efficient leakage location process – early detection allows us to deploy more quickly, and in doing so, be better able to accurately find leaks at the first attempt
- Streamline the planning and mobilisation process for repair crews to attend site to fix leaks whilst remaining cognisant of delivery efficiencies afforded by maintaining small work-in-progress inventories.

We are confident that in delivering these changes, we can reduce our detection-to-fix cycle time to less than eight days over 2020 to 2025.

The second strand of enhancing our ALC activity is to fundamentally overhaul our approach to addressing leakage in customer pipes. Modelling work suggests that leaks from customers' pipes contribute more than one-third of total leakage. The customer side leakage (CSL) process will be improved by:

- Working with colleagues from across the sector to identify and implement improvements and innovations to optimise our CSL policy. This will focus on providing timely and helpful advice on the options and facilitating quick repairs by customers
- Capitalising on the ongoing roll-out of metering to help customers identify leaks. This will be through a combination of partial smart meter provision and the option to incorporate continuous flow alarms, and the provision of in-home water efficiency advice and improvements

- Increasing the flexibility to intervene and address ongoing CSL issues – predominantly the full replacement of supply pipes – in certain circumstances, and particularly in the case of customers assessed as vulnerable.

Whilst we have less control over the cycle times from detect-to-fix on customers' pipes, we predict that the actions summarised above will greatly assist in reducing our overall level of leakage.

2. Pressure management of our network:

Enhanced pressure management is a proactive and sustainable intervention, delivering long-term resilience not just in leakage reduction, but also in reducing bursts and supply interruptions. Building on work conducted previously, and taking advantage of new technologies, we have identified additional opportunities to enhance our management of pressure largely through the delivery of targeted capital investment – creating a cost that customers will incur over a 20 to 100-year period, dependent upon the intervention made.

The relationship between lowering network pressure and leakage reduction is well established and has long been recognised as a credible and often the most effective way of reducing leakage. More recently, maintaining pressure at a stable level, has become the more sophisticated approach to pressure management.

We have adopted both methods as mechanisms to reduce leakage, ensuring that levels of customer satisfaction regarding water pressure are not impacted. Our focus for the next five years is to:

- Exhaust the options available to us from the more traditional approach to pressure management – via the delivery of a number of remaining options flagged up in recent modelling undertaken by Atkins
- Take steps to remove key areas of pressure transience that exists via the installation of more soft-start booster pumps, soft-close non-return values, and variable speed drives.

3. Leakage targeted mains replacement:

Mains replacement shares the same virtues as pressure management in relation to leakage reduction as it is a proactive and sustainable intervention, able to deliver long-term resilience across the same range of measures and spreads the cost over an extended period. Our plan is to deliver levels of mains replacement of 1% per year, a higher rate than in the current five-year period. However, through advances in technology associated with condition assessment, we believe we will be better able to target the mains with the worst integrity to improve our efficiency in delivery.

Our strategy draws on our objective to create a resilient network fit for future generations. We believe that leakage reduction needs to be delivered in a cost effective yet sustainable way and to do this it must be affordable now but without storing up problems for future generations. We have therefore made mains replacement a key part of our drive to reduce leakage, significantly and sustainably, over multiple price reviews. Our modelling has shown that if targeted correctly, our proposed programme could deliver a 5% sustained leakage saving. So, over 2020 to 2025 we will:

- Continue our mains replacement rate at a recommended base rate (to maintain stable serviceability) of 0.6% which is largely focused on reducing bursts and supply interruptions

- Enhance this programme of works by replacing a further 0.4% of our mains per year
- Improve the targeting of all mains replacement work via the adoption of new innovative techniques adopted from the both the IT and North American water sectors to conduct asset condition assessments on our network, providing for more accurate targeting of priority work and the improved effectiveness and efficiency of mains replacements for leakage reduction purposes.

We expect that, while there will be opportunities to continually improve on the efficacy of this lever, the continuation of mains replacement at the rate of around 1% per year will need to be sustained until around 2035. Even with this level of replacement, the average age of our network will increase from 62 years currently to around 69 years, based on the likely distribution of the mains being replaced in the intervening period.

In addition to delivering this benefit to leakage reduction, and as set out elsewhere in our plan, this level of targeted mains replacement will provide benefit to reducing our burst rate and supply interruptions in line with our longer-term commitments.

We have used the modelling package Pioneer for a number of years to optimise our leakage interventions. We undertake analysis through Servelec Technologies and we have well-established models which are regularly updated and recalibrated to reflect operational changes and recent interventions. In previous price review periods, the principal objective of this modelling has been to establish a baseline level of intervention on mains replacement which maintains stable serviceability of key performance commitments of leakage, supply interruptions, burst mains and discolouration contacts.

In our planning for 2020 to 2025 we have utilised the model to test leakage reduction scenarios using the premise that mains replacement will be one of the principal methods of leakage reduction. Modelling has tested reduction scenarios delivered by mains renewal alongside different scenarios of increased ALC activity and enhanced pressure management. The model has then optimised intervention outputs and provided mains intervention details including mains length and cost of renewal.

Robustness and efficiency of cost:

Expenditure, both capital and operating, is built from the current schedules of rates of our supply chain partners currently delivering leakage reduction work – be they leakage detection and location providers, or repair and maintenance teams provided through Clancy Docwra.

Aligned with the requirements of the bid assessment framework, we are actively seeking interested parties to bid for one of more of these services, subject to the remaining duration of existing agreements with our partners. Our bid assessment framework is available in Appendix A4.4 - Bid assessment framework.

Operational expenditure on ALC activity has been split between base expenditure, to hold leakage at 24 Ml/d, and enhanced expenditure which helps deliver the 15% reduction by 2025. The remaining element of enhancement opex is derived from the increase in interventions undertaken on customers' supply pipes as part of our work to tackle leakage in all parts of the network.

Both our enhanced pressure management and mains replacement activity require capital investment. These enhancement costs capture the additional investment we propose to undertake based on our modelling of leakage interventions.

As part of our work on assessing options to reduce leakage, our engineering partner Atkins was commissioned to conduct a network-wide study of future potential pressure management opportunities. The outputs produced include quantification of potential leakage savings per area, estimates of the cost of implementation and practical advice and recommendations for the delivery of schemes.

We are currently building a scope of works that we intend to start in the next two years to take advantage of some of these opportunities. This work will continue over 2020 to 2025 and complement the initial findings, allowing us to progress with the specific capital solutions indicated by the Atkins work.

As outlined earlier, this element of our mains replacement programme will build on our base activities in order to contribute the required proportion of leakage reduction as indicated in our modelling, and the delivery of this work is undertaken by our infrastructure term services partner under tendered schedules of rates. Furthermore, our work with other partners to introduce a new condition-based assessment of mains, allowing us to better target the correct infrastructure, will assist in ensuring we secure a high level of efficiency in the reduction of leakage.

Efficiencies, as explained in detail above, have been assumed on all expenditure.

Customer protection and affordability:

We are committed to delivering the challenging target we have set for leakage reductions each year to 2025. This will be delivered by maintaining our existing activity and the enhanced programme we have explained. We have proposed a financial performance commitment aligned with delivering our target, with material penalties applied for underperformance, as set out in Chapter 2 - Pledges, incentives and bills.

The cost of this leakage enhancement work – funded through capital investment and operational expenditure – adds around £5.80 to the average annual bill.

Reducing water use

By 2025 we are committed to reducing water use by targeting a 7.3% reduction in per capita consumption (PCC). We currently have a target in place to install 32,000 meters between 2015 and 2020. The planned activity in 2020 to 2025 is an enhancement on the current programme as it will require installation of 81,000 meters on existing properties and an increase in water efficiency related activity. The full cost of the programme is £22.9m which is broken down in Table 7. In addition, there is circa £210,000 per year in base operating expenditure to continue our current level of water efficiency activity which includes our education and outreach activities, installation projects for water saving devices and research projects.

Table 7: Water use reduction expenditure by activity

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Metering	4.293	4.128	4.041	3.958	3.880	20.300
Water efficiency measures	0.539	0.529	0.518	0.507	0.496	2.589
Reducing water use totex	**4.832**	**4.657**	**4.559**	**4.465**	**4.376**	**22.889**

Need for investment:

We have highlighted throughout our plan the important role that reducing customer usage plays in both delivering long-term resilience and enhancing the environment. Although our current PCC of 147 litres per person per day (under the consistent methodology) does not make us an outlier in the industry, some of our neighbouring companies in the south east are achieving consistently lower levels, which means we know there is more we can do.

Reducing PCC is one of our key challenges for both the short- and longer-term and, like leakage, we know we need to do more. We will enhance our current metering and water efficiency programmes to deliver further sustained and significant reductions in PCC over the next five years and beyond.

Our overall aim is to reduce the water we take from the environment whether that is from reducing leaks or reducing usage. Reducing usage by 7.3% from 2020 to 2025 was supported by our customers. Our draft plan proposed a lower reduction but customers gave their support for going further. More information on this is available in the Customer Engagement Chapter and the Pledges, incentives and bills Chapter.

The reduction over 2020 to 2025 is set in the context of our long-term strategy to reduce demand to 118 litre per person per day by 2050.

Best option for customers:

By 2019/20 we will have reached 60% meter penetration. As one of the few water companies in the south east that has not adopted a compulsory metering programme, this is lower than many of our neighbours. There is widespread support to increase meter penetration from our stakeholders and customers, however not all support a compulsory programme. We accept this and propose to increase metering penetration to 90% by 2025 (and 95% by 2030).

Options assessment was carried out as part of the development of our revised draft Water Resources Management Plan (WRMP). These options were appraised by assessing both the costs and benefits of each, and then applying a modelling approach to give the optimal solution. In considering the options, we have been guided by customer preferences, Government policy priorities and the priorities of local stakeholders. The detail of this options assessment is provided within our revised draft WRMP.

This options assessment has resulted in us planning on the following mix of activity:

- Metering programme – deliver 55% of the reduction by expanding and accelerating our current fit rate at customers' premises, and introducing new technology to monitor water use more closely
- Water efficiency programme – deliver 45% of the reduction through increased engagement and providing greater assistance to customers to help reduce consumption.

Each activity is explained in greater detail below. The two elements of our usage reduction programme will complement each other and will often be delivered simultaneously to customers. Indeed, newly metered customers will, as part of the communications process, be invited to complete a savings calculator (online or by phone) and in doing so, dependent upon their responses, can quality for one of our water efficiency home visits.

We consider that this approach presents the best option for our customers. In addition to moving to a fairer way to pay for water for all, customers will benefit from lower energy bills because of using less (hot) water. The installation of meters (and particularly smart meters) will greatly assist in the identification of customer-side leaks. More broadly, customers will ultimately benefit from a more sustainable and resilient environment.

1. Metering programme:

Based on data from our and other companies' programmes, the following benefits are being seen:

- Standard meter – 56 litres/day/household
- Smart meter – 72 litres/day/household.

We will explore the optimal approach for moving customers to metered supplies. This could be a continuation of our current optant and change of occupancy programmes, the introduction of a compulsory programme, or a combination of both.

Part of our plan will be to include a proportion of smart meters within the roll-out. As outlined in our Innovation Chapter, we are currently trialling a number of smart technologies – both the meter itself, and the broader communications infrastructure requirements. This technology is developing very quickly, and the cost reducing. We expect this to continue in the run-up to 2020 and over the following five years.

2. Water efficiency programme:

We used the results of recent water efficiency programmes supported by industry data, to assign savings to each of the activities within the programmes:

- Generic campaigns – 2 litres/day/household
- Targeted engagement – 10 litres/day/household
- Water saving packs – 25 litres/day/household
- Home visits – 45 litres/day/household.

These figures have been used for a number of years and so have been subject to internal and external audit as part of the annual reporting process. They are benchmarked against industry datasets (e.g. the Waterwise Evidence Base), company measured savings (using meter readings pre- and post-intervention) and customer data from surveys.

The concept of a water efficiency programme is proven – albeit ours has operated at a comparatively low level. Benefit comes through scaling this up, but also by adjusting the mix to favour some of the 'harder' measures (i.e. home visits) over 'softer' measures (i.e. generic campaigns). To achieve our PCC target and support our (potentially compulsory) metering programme we will do both. Our plan proposes to enhance the water efficiency programme – and shift the balance more towards home visits – so that we achieve a PCC reduction of 0.8 litres per year, (or 4 litres per head over 2020 to 2025).

As set out above, the enhancement to our plan sees a change in the mix of work we will undertake. Over 2020 to 2025 we will continually look to identify and implement improvements to the methods we adopt. For example, the third element of the water efficiency programme (research projects) focuses on behavioural change where the level of intervention is designed to achieve an appreciable shift in the way the person uses water at home. The interventions will utilise techniques such as social norms to nudge consumers into habits that are more water efficient, and we will benefit from the development of digital platforms led by our retail function to help test, learn and optimise the output of these research projects

Robustness and efficiency of cost:

The costs of our enhanced metering programme have been built by extending our current metering programme costs. The unit rates for installations are driven from rate schedules within our infrastructure term services contract with Clancy Docwra which will extend through 2020 to 2025. We predict, through discussions with other organisations that have conducted compulsory metering programmes in the past, that any efficiencies in increasing the density of meter installations generated from compulsory programmes will be offset by the requirement for additional communication and planning of mass roll-out programmes.

Aligned with the requirements of the bid assessment framework, we are actively seeking interested parties to bid for one or more of these services, subject to the remaining duration of existing agreements with our partners. Our bid assessment framework is available in Appendix A4.4 - Bid assessment framework.

Efficiencies, as explained in detail above, have been assumed on all expenditure.

Customer protection and affordability:

We are committed to delivering the challenging target we have set for usage reductions each year to 2025. This will be delivered by maintaining our existing activity and the enhanced programme we have explained. We have proposed a financial performance commitment aligned with delivering our target, with material penalties applied for underperformance, as set out in Customer Engagement Chapter.

The cost of this work – funded through capital investment and operational expenditure – adds around £7.90 to the average annual bill.

Delivering WINEP

The Water Industry National Environment Programme (WINEP) is the programme from the Environment Agency that outlines the actions that we need to complete to meet our environmental obligations including the Water Framework Directive (WFD). We will complete 24 investigations or actions between 2020 and 2025 at a total cost of £1.5m.

Table 8: WINEP expenditure by activity

£m, 2017/18 prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	**Total**
Water Framework Directive	0.194	0.190	0.186	0.182	0.178	0.930
Catchment management	0.097	0.095	0.093	0.091	0.089	0.465
Non-invasive species	0.017	0.017	0.017	0.016	0.016	0.083
Delivering WINEP totex	**0.308**	**0.302**	**0.296**	**0.289**	**0.283**	**1.478**

Need for investment:

We are required to conduct a number of investigations and deliver actions and measures between 2020 and 2025 under the third release of WINEP. All agreed schemes have either a water quality (Drinking Water Protected Area - DrWPA), water resource (Water Framework Directive - WFD) or invasive non-native species (INNS) driver.

The 24 schemes we are required to complete are classified as follows:

- 13 water quality investigations or catchment schemes
  - five are quality investigations, focusing on ensuring we have fully characterised the relevant catchment areas in order to identify any action that may be needed to prevent any potential deterioration in surface or ground water quality
  - eight quality catchment schemes are to be completed where we have completed investigations prior to 2020 and identified a programme of work and measures that will aim to improve quality, thereby eliminating any future need for treatment. One of the schemes overlaps with the undertaking agreed with the Drinking Water Inspectorate for addressing metaldehyde.
- Eight water resources schemes, seven relating to abstractions in the River Wandle catchment, and one in the Upper Darent catchment – all with WFD drivers – focused on the prevention of the deterioration of the ecological status due to flow pressures. A successful outcome will be dependent on collaborative working with key stakeholders and neighbouring water companies.
- Three Company-wide schemes relating to invasive non-native species and biosecurity focused on the prevention of deterioration due to the spread of INNS by the identification of any risk factors and possible pathways for spread, the delivery of training and awareness and operational measures to reduce risk. Our schemes require both investigation and delivery in the period.

Best option for customers:

WINEP3 represents a continuation of the work we have been delivering to better understand and ultimately improve the environment across the region.

We have elected to focus on the delivery of WINEP3 as our river-based environmental enhancement commitment, which is predicated upon the completion of the 24 actions or investigations required by the schemes summarised above. We believe the continuation of our work in this area – through the continuation of some existing approaches, with the adoption of new ones – as outlined earlier in this chapter, represents the best overall option for our customers.

Robustness and efficiency of cost:

The enhancement costs associated by the proposed delivery of the WINEP3 obligations are categorised as operational expenditure. The detail of these schemes was published in March 2018. These costs have been built as follows.

- For water quality investigations and catchment schemes, an internal assessment of the likely scope of works and associated costs has been made, based on experience from previous work undertaken with external consultants and other partners
- This approach has been extrapolated and applied to the three company-wide INNS schemes
- Both sets of costs are built from the current schedules of rates of our supply chain partners delivering these scopes of work now and in the future.

Based on the current level of detail that exists for some of these schemes at the present time and the uncertainty around what follow-on actions will be required, there is a level of estimation that has been required to cost this element of our work.

Many elements of the process of delivering these schemes are still to be determined, and the contribution to co-funded solutions yet to be agreed. In these cases, we have taken an assessment based on our knowledge of the issues and the locations to which they apply. These assessments have been informed in part, to the extent it is possible at this stage, through engagement with other stakeholders and our engineering partners.

An example of this is an assessment of the costs of probable interventions to be made on the Wandle and Hogsmill rivers which may be required under the Water Framework Directive. Here, we are expecting that any material interventions will be co-funded between ourselves and other stakeholders in the joint delivery of solutions.

Efficiencies, as explained in detail above, have been assumed on all expenditure.

Customer protection and affordability:

Customers are protected by virtue of the drivers for the delivery of this work being legal obligations that we are required to remain compliant with. We have also proposed a performance commitment based on the timely delivery of the WINEP3 outputs as explained in the Pledges, incentives and bills Chapter.

The cost of this work adds around £0.90 to the average annual bill.

Lead replacement

We are enhancing our lead replacement strategy at a total cost of £1.7m. This is on top of our base level of service with associated expenditure of £1.8m.

We are required to continue to deliver our current lead strategy whilst lead remains a risk in our distribution network. We manage plumbosolvency through the optimised dosing of orthophosphoric acid at our treatment works and look to eliminate lead communication pipes that we own, promoting the removal of customer-owned lead supply pipework.

The Water Supply (Water Quality) Regulations lists our obligations regarding lead pipework. The Regulations state that we must act:

- for a sample that breaches the lead standard; and,
- when a customer is replacing their private lead supply pipe, there is a requirement on a water company to replace their pipework.

We had a Drinking Water Inspectorate (DWI) Undertaking for lead up to 2015. This was completed in March 2015 and the DWI was satisfied that the Company had met its obligations and there was no requirement for a further Undertaking for 2015 to 2020 or beyond.

However, the DWI made it clear in their Undertaking closure letter that they expect the Company to "*continue to maintain the quality of drinking water supplied to the consumers in respect of lead as per your current lead strategy*". Furthermore, and more generally, the DWI have made it clear that they would support the inclusion of trials, lining techniques or otherwise, to reduce the impact of lead pipework on water quality.

Therefore, there is a requirement for us to have an on-going lead strategy that encompasses our previous activities as routine. These include continuing to:

- Provide free customer lead checks, analysis of 'hot spots', review of treatment effectiveness and maintaining an enhanced monitoring strategy
- Replace all lead communication pipes where lead >10 µg/l is detected in any sample, and all lead communication pipes during mains replacements
- Replace lead communication pipes when customers replace their part of the lead service pipe
- Replace all lead communication pipes when repairing leaks and when a replacement is required due to a level of service failure such as flow and pressure
- Provide customer education and information on the risks of lead in drinking water, available through the website and in correspondence with customers
- Provide the activities considered routine; including, enhanced monitoring of both lead and nickel, keeping records of the number of customers requesting lead checks, regularly reviewing treatment effectiveness, promoting the lead pipe replacement scheme, continuing the proactive replacement of lead pipes, monitoring the number of replacements carried out and keeping our customers informed and educated on the risks of lead in drinking water.

At present, we replace around 300 communication pipes per year as a result of customers replacing their supply pipes. In addition, we replace around 30 communication pipes per year because of sample failures. Lead communication pipes replaced for other purposes – during mains replacement work, or repairs leaks – are not considered part of our 'base' expenditure on lead.

Need for investment:

Since 2000, the Water Supply (Water Quality) Regulations 2000 has reduced the permitted standard for lead in drinking water, from a level of 50µg/l in 2000 to 25µg/l by 25 December 2003. The level decreased further to the current drinking water standard of 10µg/l on 25 December 2013, as a result of the Water Supply (Water Quality) Regulations 2016.

In addition to the obligation to continue in all the activities considered routine; the DWI issued a long-term planning document in December 2017 specifically highlighting the desire to expedite the reduction of lead in drinking water due to company-owned pipework.

Therefore, for 2020 to 2025, whilst there is not a current regulatory quality driver, we have proposed an enhancement to our strategy to replace all company-owned lead communication pipes where the concentration detected in any sample taken (compliance, operational or check sampling) exceeds 5µg/l (rather than 10µg/l). This will increase the number of lead communication pipes removed due to a failure to approximately 100 per year (from 30 currently).

In addition, we are also proposing to replace customers' supply pipes (in addition to the communication pipe) in the event of a lead sample exceeding 10µg/l. This would result in around 30 supply pipes being replaced each year.

Finally, the last element to our enhanced lead replacement strategy is the proposal to separate the shared supplies to 100 properties per year, where these properties are supplied by lead mains. We are discovering that these large lead shared supplies are generally of poorer integrity – and therefore provide the potential to fail lead samples as well as leak. By providing new, separate supplies, the lead risk would be greatly reduced, any customer-side leakage could be addressed, and meters can be fitted to each property.

Best option for customers:

There are approximately 100,000 lead communication pipes (45% of property connections) owned by the Company. The number of lead supply pipes, owned by customers, is unknown but, due to the opportunistic replacements of communication pipes over time by the Company, the number of lead supply pipes is expected to be significantly more than 100,000.

This enhancement programme has been proposed in advance of there being a formal regulatory requirement to do so. With our lead Undertaking having been completed – subject to continuing with our base activities, as set out above – a clear option exists for us to conduct no further work at this time.

However, considering the direction of travel indicated by the DWI regarding the requirement for a further reduction of lead in drinking water, we believe that steps should be taken now to pre-emptively start to address this issue.

From analysis and testing that we have undertaken, we are aware that increasing the rate at which we dose orthophosphoric acid has no discernible impact on the level of lead failures (but would, coincidentally, have greater impact on the environment owing to the levels of phosphate requiring removal as part of the wastewater treatment process). Addressing the issue of lead is most cost effectively, and robustly, done via its removal from the system.

The replacement of communications pipes in instances of detection >5 µg/l, and of service pipes (in addition to communications pipes) in instances of detection >10 µg/l delivers increased resilience to our services, and an appropriate acceleration in our activities to protect the health of all customers.

Robustness and efficiency of cost:

The costs of our proposed enhanced lead replacement programme are built from the schedules of rates adopted with our infrastructure terms services partner, Clancy Docwra, with whom we have an eight-year framework. It is this arrangement that is currently employed to deliver our base lead replacement programme, with the enhanced programme becoming an extension of this.

There are not perceived to be substantive economies of scale as a result of enhancing the scope of this work. However, as with other capital delivery programmes, we have challenged ourselves to deliver efficiencies on our approach to delivery. Efficiencies, as explained in detail above, have been assumed on all expenditure.

Customer protection and affordability:

Customers are protected by virtue of the existing DWI requirement for us to continue to comply with the routine (base) activities that formed the basis of the Undertaking until 2015. Our proposed enhancement programme provides additional protection for the customers that are most at risk from exposure to lead and goes beyond current regulatory drivers to mitigate this risk.

The cost of this work adds around £0.50 to the average annual bill.

Supporting house building

The population in our area of supply is forecast to rise from the current level of around 707,000 to one million by 2080, as explained in our revised draft Water Resources Management Plan.

Need for investment:

To support this growth our plan includes an enhancement programme of £9.4m. This includes £5.7m for extending the network for new connections and £3.7m for mains replacement. The cost of mains replacement has been allocated between base expenditure and to support new housing on the basis of an 86:14 split. This is based on historical records for upsized mains.

Best option for customers:

The approach taken by Ofwat in terms of offering customers effective competition for contestable services is welcomed, and we will fully embrace this. Additionally, the restructuring of charging mechanisms to provide greater transparency of our cost-base and confidence to developers also benefits our household customers, ensuring that the cost of providing infrastructure for developments is delivered at zero cost to the end customer.

Robustness and efficiency of cost:

The costs for mains extensions and mains replacement – the two enhancement activities that support growth – have been built from the schedules of rates of our infrastructure term services partner, Clancy Docwra, who currently deliver all developer-related work on our behalf under a competitively tendered framework.

Efficiencies, as explained in detail above, have been assumed on all expenditure.

Customer protection and affordability:

Enhancement and extensions to our network to support growth are paid for by those customers connecting to the network not through water charges. Therefore, the costs of this activity do not impact the average annual bill.

Finally, the inclusion of the developer experience satisfaction measure (D-MeX) as a financial performance commitment provides the assurance that we will work to ensure the service we are offering all developers is of the appropriate quality and able to constantly evolve with the needs of the market.

Conclusion

Our wholesale services plan will be delivered for £253.3m. This includes £61.7 million of expenditure above base costs, to enable us to deliver the higher levels of service and resilience expected by our customers and meet our ambitious targets. We will be more efficient, reducing our wholesale costs by £18.7 million of the five-year period.

Our plan is built on strong current performance in a number of key areas. However, we are not complacent. To meet our customers' expectations, give them confidence in our ability to deliver and provide resilient service in the future we need to increase our investment over the five-year period, to enable us to meet our longer-term objectives.

We are committed to continuing to deliver industry-leading performance in key areas such as burst mains, supply interruptions, leakage and water quality, enhancing our approach by using innovative methods and technology to monitor, control and target investment in our network more accurately. We will continue to deliver all our statutory obligations and act to enhance the quality and resilience of the environment. We’ll also deliver the first five years of our revised draft WRMP – reducing how much water we take from the environment and making what we have go further by cutting usage and leakage.

CHAPTER 5

Financing

Remaining financially resilient in the long-term

In this chapter you will hear about

- Our financing strategy.
- How we have assessed our long-term financial resilience.
- Enhancements to our approach in key areas, such as reducing gearing, that are important for the sector.

Financing our plan

The way in which water companies finance their operations and investment, the level of debt versus equity, the returns received by investors, stability of customers' bills over time and the long-term resilience of financial arrangements are all areas of increasing scrutiny by government, regulators and other stakeholders, including the communities we serve.

Addressing these matters in an open and transparent way is essential to increase our customers' trust and confidence and will ensure we remain on a firm financial footing over the course of this plan and beyond, able to mitigate risk and manage uncertainty.

Ofwat has set out clear expectations through its recent 'Putting the sector back in balance' consultation and subsequent decisions on how it expects companies to operate and behave. We consider we are in a strong position but are nevertheless taking immediate action to do more. Our Business Plan sets out how we are addressing these issues and ensuring that we are financing our business in a way that strikes the right balance of risk and return between our customers and shareholders and is appropriate for a company of our size.

This chapter covers:

- Our financial structure and strategy
- The adopted weighted average cost of capital (WACC)
- Dividend policy and benefit sharing
- Long-term financial resilience
- Our Pay-As-You Go (PAYG) and RCV run-off rates
- Return on Regulatory Equity (RoRE).

Our financial structure and strategy

Our current financial structure

Our existing financial structure has served us and our customers well for over 15 years. It has enabled an ongoing investment programme delivering benefits to current and future customers, has proved resilient to cost-shocks in the past and is judged as a solid investment grade by credit rating agencies. Our two main shareholders – Sumitomo Corporation and Osaka Gas – have demonstrated that they are responsible long-term investors committed to the UK water industry. They provide a strong equity-backing to underpin the delivery of our legal and regulatory obligations and deliver more of what matters to our customers.

Our financing structure at 31 March 2018 is:

Net debt is the sum of our index-linked bond (£154.3m), a bank loan (£40.7m), preference shares (£12.4m), debentures (£0.1m) and cash in short-term deposits (-£14.8m).

Our primary source of debt financing – the index-linked bond issued in 2001 – has provided the bedrock for our investment programme since it was issued and has underpinned the benefits delivered to our customers through our long-term investment programme. Further explanation of the efficiency of our bond can be found in the following section on our proposed WACC.

Our finances have proved resilient to changes in the external environment. We maintain a public credit rating, which contributes to the transparency of our financial resilience and have kept a steady Baa1 rating with Moody's since April 2005. We are one of the few highly-geared companies who have been neither down-graded nor placed on negative outlook over the last 12 months under the prospective credit-negative impact of the PR19 review and associated benefit sharing proposals. We were also upgraded to BBB+ by S&P Global in 2015.

This is largely due to the special protections associated with our bond, which have strengthened our credit worthiness through specific requirements that ensure funding for undertaking legal and regulatory obligations is protected. These include:

- Financial covenants on interest cover, adjusted interest cover and gearing – breach of which triggers dividend and cash lock-up clauses to protect the interests of the business
- Requirements for funding reserve accounts which provide for one month's operating reserve as well as debt service payment and reserve accounts

- Annual certification of 'no changes' in the regulatory or operating environment that would have a material impact on our ability to comply with covenants
- A special purpose holding company sitting immediately above the Company, with independent directors whose permission is required to make dividend payments to shareholders.

Our shareholders also have a strong track record of ensuring that we remain compliant with a changing, and more demanding, corporate and regulatory environment. Two specific examples illustrate this well:

- In 2015, our shareholders agreed a much-reduced ordinary dividend from the appointed business of just £1.0m (equivalent to return on regulatory equity of c.2%), ensuring that our balance sheet was strengthened prior to start of the current price control period
- In December 2014 both Sumitomo Corporation and Osaka Gas reduced their representation on our Board from two to one member each, completing our response to the principles on board leadership, transparency and governance by ensuring that independent non-executive directors became the largest single group on the Board.

Our existing financing structure has shown itself to be efficient, resilient to factors outside our control, and responsive to changes in the environment in which we operate.

Our financing strategy to 2025

Notwithstanding the strengths of our current financial structure, we recognise that gearing levels of over 70% may no longer be considered resilient by our regulator in an environment of reducing returns and greater levels of dependency on the delivery of stretching performance commitments to secure the reduced level of expected returns. We have explored options to respond to the explicit challenges posed by Ofwat and the Government and are taking action to change the balance of our financing structure to align with the assumptions that will be adopted by Ofwat for the PR19 price control review. These will be in place by 2020.

Our financing structure at 31 March 2020 will be:

Net debt is the sum of our index-linked bond (£164.7m), a bank loan (£20.0m), debentures (£0.1m) and cash in short-term deposits (-£24.7m).

The measures we are taking to achieve this include:

- Reducing levels of net debt and increasing shareholder equity
- Tackling long-term embedded debt economically
- Securing a letter of support from our shareholder.

We consider that the actions we are taking demonstrate our ability to move quickly in both making and implementing decisions, which is a strong characteristic of the nature of a small, local business.

Reduce levels of net debt and increase shareholder equity:

We have agreed actions to reduce our level of net debt and increase shareholder equity within the business, to fall within the ranges deemed efficient by Ofwat – and to keep such levels consistent in the longer term. Our intention is to reduce our level of gearing from over 77% today to below 60% by April 2020. We'll do this by:

- Redeeming an existing £30m five-year bank loan
- Reducing the drawing on our existing £25m revolving credit facility by £6m
- Converting £12.4m of historic preference shares into ordinary shares
- Increasing the ordinary equity in the appointed business by a further £4m.

Together these measures reduce our net debt by over £32m and, with RCV growth, increases shareholder regulatory equity by over £56m.

Borrowing and gearing will rise modestly between 2020 and 2025, although gearing will remain below 65%, partly through increasing the ordinary equity of the appointed business by a further £6m during the five-year period.

Tackling long-term embedded debt:

The conversion of historic preference shares into ordinary shares demonstrates our ability to address those elements of our long-term embedded debt that can be tackled in an economically rational manner. We commissioned a report from EY (see Appendix A5.2 - Funding efficiently incurred embedded debt at PR19) which explains that seeking to redeem the index-linked bond would not be economic or in the interests of customers or any other stakeholders (except perhaps the bond-holders themselves, who would demand a significant premium over the current carrying value of these instruments). The historic interest rate on the bond will therefore continue to be incurred through to its term. However, economic steps are being taken to address historic borrowing with interest rates that are high relative to the rates available on borrowing taken out today. Preference shares with coupons of 7.8% are being converted into ordinary equity, removing the debt with the highest rate of interest from our portfolio.

Removal of our principal long-term embedded debt – our index-linked bond – will therefore not take place before its original redemption dates, over the five years from 2027. Our stress testing of long-term financial resilience has adopted very prudent assumptions about the possible impact of this long-term re-financing requirement – taking into account the possible costs of issuing replacement facilities and not assuming material savings on the interest rate payable after re-financing. This cautious approach is considered prudent at this point in time, given the uncertainty of projections of interest rates nearly ten years out from today. We are, however, taking action to mitigate a feature of the bond redemption requirements that would, if no action were taken, start to crystallise in 2022. This is a requirement to create sinking funds for the redemption value of the bonds some five years before redemption is due. Creating such sinking funds would require additional borrowing, increasing gearing materially and reduce our ability to withstand financial shocks. Discussions have commenced with the controlling finance party to agree a waiver of the sinking fund requirement. Our financial resilience stress tests for the 2020 to 2025 period encompass the impact of accepting the initial buy-out proposal in full, which is not assumed in our projected base cost of financing. Even under the worst-case scenario, we remain financially resilient.

Enhancing our financial resilience:

Later in this chapter we provide a full description of all aspects of the rigorous stress-testing of our long-term financial resilience we have undertaken. Our approach has been consistent with the tests undertaken for the Long-Term Viability Statement published in our Annual Report 2018. Whilst we consider that we have adequate headroom for most plausible scenarios, and combinations thereof, through to 2030, the Board considers that additional headroom might be needed simply because the probability (albeit relatively remote) of more than one event or combination of events occurring increases with the longer time horizon being considered. The Board have therefore sought and obtained a signed undertaking from our two main shareholders – and the intermediate holding company Boards – of their intent to provide financial support in the scenarios described to ensure that we are able to continue financing our functions and providing services to customers. A copy of the signed undertaking is provided in Appendix A5.4 - Form of undertaking for AMP8 headroom.

The adopted Weighted Average Cost of Capital (WACC)

We welcome Ofwat's approach of issuing, as part of the PR19 Methodology, indicative guidance on the WACC that might be appropriate for companies to adopt. This has supported our dialogue with customers about the cost of our plan and bills over the 2020 to 2025 period and has meant that we have not had to commission third party studies into the likely level of the WACC to help us develop our plan.

For our Business Plan submission, we have adopted the indicative guidance on WACC with one deviation. We have included a company-specific adjustment to the cost of debt of 25bps. This increases our wholesale WACC to 3.45% for 2020 to 2025, resulting in an extra £1.75 on the average annual bill.

We believe this uplift is justified to address the unavoidable additional costs that we incurred in raising debt financing due to our relatively small size and the infrequency with which we raise substantive debt.

This is supported by our customers, with 82% willing to pay more to be served by a small company. See Appendix A1.4 - Phase three small company research report for an explanation of the methodology and full results. It benefits customers and wider society as the industry-leading performance generally displayed by smaller companies serves to set the targets for the wider industry, driving up overall service levels across a range of key measures to deliver more of what matters to customers.

The additional cost of debt

The economic rationale for a company-specific adjustment to the allowed cost of debt has been well-evidenced in the past and remains valid. There is an undoubted premium relative to the industry-wide cost of capital deriving from a smaller company's higher level of observable operational leverage relative to the larger primarily, but not exclusively, water and sewerage companies.

Operational leverage is measured as the relationship of a company's regulatory capital value (RCV) to the overall size of the business in terms of revenue and expenditure (both operating expenditure and totex). The higher the operational leverage of a company, the greater the risk it faces of revenue or expenditure variations relative to the asset base (RCV). This means that the same magnitude of cost or revenue shocks have a much larger impact on return on capital (and on returns to equity) than for companies with lower operational leverage.

In theory the level of operational leverage is not directly related to the size of a business overall – it can vary across small and large businesses. However, in practice our actual level of operational leverage is materially higher than that of the larger water and wastewater companies.

This was evidenced in a report from Frontier Economics submitted as part of our PR14 Business Plan, available in Appendix A5.1 - Cost of capital premium and net customer benefit - PR14 submission, which showed that our significantly higher level of operational leverage has persisted since privatisation and arises from differences in underlying characteristics of companies, which are not ones that prudent management can control, or indeed influence, even over a very long time period. Regulatory principles therefore require an appropriate allowance for this risk.

The report illustrated how a notional cost shock (of 5% of operating costs) has over twice the effect on the return on RCV for us as it would for an average water and sewerage company. In practice, returns on regulatory equity have varied much more for smaller water only companies and us in particular.

The observed greater risk to returns in the past has arisen from the underlying characteristics of the business and these have not changed. The risks remain valid for the future and underpin the need for a higher allowed cost of capital.

Greater risk directly translates into a higher return required by providers of finance and explains the higher efficient borrowing costs for smaller companies. This is supported by explicit recognition in the credit risk assessments undertaken by the independent credit rating agencies. S&P Global, for example, make it clear that exposure to higher financial risk affects their assessment of our credit rating despite the overall 'Excellent' Business Risk rating and a 'Strong' competitive position (see pages 5 and 8 of their latest credit rating report on us, at Appendix A5.5 - S&P Global Corporate Credit Rating).

This greater risk compared to larger peers is specifically linked to a one-notch downgrade from the 'anchor' rating of a-, a factor that will remain beyond management control in contrast to the actions that have been taken to secure – and retain – the upgrade to a BBB+ rating.

Below we explain the three key reasons why we believe this uplift to the WACC is justified, which meet the criteria set out in the PR19 Methodology – namely that our debt has been efficiently incurred and that we have an efficient level of costs in general, that we have our customers' support for an allowance and making an allowance is in the interests of customers in general.

Debt has been efficiently incurred and our overall costs are efficient

As highlighted above, there are specific characteristics of small companies that mean the cost of debt is higher. We do however accept that debt must still be efficiently incurred.

We have had open dialogue with Ofwat over the course of the development of the PR19 Methodology on the efficiency of our index-linked bond, which makes up the majority of our net debt. To fully understand whether our bond was efficiently raised at the time we took it out and whether we could efficiently mitigate the costs in future, or could have done so in the past, we commissioned a report from EY which was submitted to Ofwat in July 2017 (and available in Appendix A5.2 - Funding efficiently incurred embedded debt at PR19).

Having considered the cost, quantum, timing, tenor and index-linking of our bond issuance, EY concluded that the evidence reviewed did not suggest there was reason to consider our bond was inefficient and there would not appear to be any benefit to us or our customers from refinancing the bond.

The report shows that we took efficient financing decisions in good faith at the time, and demonstrates that it has not been efficient to refinance this debt at any point since. Our size means that we have not needed to raise material additional debt subsequently.

The Retail and Wholesale Chapters explain the actions we have taken to ensure that our expenditure proposals represent an efficient level of costs overall. The scale of the efficiency gains being implemented in the current regulatory period – together with the actions planned on wholesale totex and retail cost to serve from 2020 to 2025 – lead us to believe that our costs will be found to be efficient compared to the benchmarks established through the comparative cost assessments that will be undertaken by Ofwat.

We have our customers' support for an allowance

At PR14 we responded positively to the challenge set out in Ofwat's Risk and Reward Guidance to demonstrate customer support for a company-specific adjustment to the industry WACC. The results showed that customers were able to identify many attributes of small and local businesses without needing prompting – the vast majority of which were positive. Most participants had a strong preference for being served by a small rather than large company and were prepared to pay a premium on their annual bill.

Recognising that customers' attitudes may have changed over time, we undertook new research with customers in phase three of our customer engagement programme, using a more engaging approach to test attitudes (as described in our Customer Engagement Chapter).

As at PR14, respondents primarily identified positive attributes related to being served by a small company. Crucially, 82% of customers were willing to continue to pay an additional £4 per year to be served by a small company. We proposed £4 as the potential maximum impact that also allowed customers to make a meaningful comparison between their bill and the average bill of all water companies. The actual impact of the addition to the allowed cost of debt is materially lower at £1.75. The key reasons our customers gave for their support were that they would receive a better service, the company was viewed as being more in touch with local people and it was seen as a small price to pay. These results have been shared with and reviewed by our Customer Scrutiny Panel.

An alternative approach to testing whether our customers are willing to pay a small (£4) premium for the benefits of being served by a small, local company has therefore strongly validated the findings from the exercise undertaken by a different research company using a different survey technique at the PR14 price control review. Our customers' views have remained consistent over time and are strongly supportive of a company-specific adjustment to the allowed cost of capital.

An allowance is in the interests of customers in general

The third test specified by the PR19 Methodology for considering a company-specific adjustment to allowed financing costs is that it is capable of providing benefits not just to the customers of the company but to customers in general across the country. We have jointly commissioned an independent study by EY to establish the practical as well as theoretical evidence that smaller companies deliver benefits to society in general through characteristics and actions that arise from the distinctive characteristics of small companies. The full report is included at Appendix A5.3 - The value of small local water only companies.

The report describes four hypotheses about the advantages that being small and local might give rise to. These are that:

1. Small local firms have more agile decision-making structures
2. Small local firms are better at innovation
3. Small local firms are more consumer orientated
4. Customers prefer products and services from a local company.

These hypotheses are tested against a broad spectrum of peer reviewed academic literature and observations from other industries and evidenced by a number of case studies. They resonate with key features of our own performance and behaviour that have been highlighted in other parts of our plan and are summarised below.

Agile decision making:

- The rapid roll out of our social tariff trial, entirely funded by the Company and its shareholders
- Minimum disruption to customers during the March 2018 freeze/thaw event due to our detailed operational knowledge, short chains of command and rapid executive decision making.

More effective innovation:

- We have established ourselves as a sought-after testbed for partners looking for opportunities to test innovative concepts, such as our work with Google Maps and our current work to develop a non-dig water main condition assessment.

More customer orientated:

- Our social tariff scheme had high levels of customer support from both those who were eligible and those who fund the scheme through bills
- Our customer engagement programme for the PR19 price control review has reached across communities, including those hard to reach groups through links with local organisations such as foodbanks, and this is evident in the plan we have built.

Customers prefer products and services from a local company:

- Our customers identified overwhelmingly positive attributes associated with being served by a local company with statistically reliable evidence.

The report demonstrates that these are distinctive features of size and underpin performance which sets standards for all companies in the sector – as evidenced by our frontier-shifting performance on a number of measures – and drives benefits for customers across the country. This includes setting standards across a range of service measures as diverse as retail cost to serve and overall operating expenditure efficiency to water quality compliance, burst frequency and leakage. We are proud of our record on the last three – and are setting ourselves ambitious targets for ensuring that we remain at the forefront of the sector for many years to come.

Quantum of the company-specific adjustment included in our plan

In addition to meeting the three requirements of the methodology we have also taken two other factors into account when deciding the size of the adjustment included in our plan. These are:

- Recent regulatory precedent – 25bps was the allowance on the cost of debt granted to some water companies in their PR14 Final Determinations
- Overall pressure on affordability – we tested our draft business plan incorporating a 25bps uplift to the cost of debt with our customers who supported our proposals.

We have therefore included a 25bps uplift to the cost of debt in our proposed Weighted Average Cost of Capital to enable us to deliver their priorities.

Dividend policy and benefit sharing

Our Board has always taken a responsible and proportionate approach to decisions on dividend payments, balancing the legitimate interests of customers and returns for investors with the actual performance of the business. We will maintain the key features of our current dividend policy as we believe it is already in-line with Ofwat's expectations. We will do more to make the process we follow when agreeing and making dividend payments more transparent and accessible.

Specific reference to this has been added to our proposed dividend policy statement for 2020 to 2025 which is set out below (changes from the current statement are in bold).

Our proposed PR19 dividend policy statement:

"The Board considers that the base level of ordinary dividend for the appointed business should reflect the return on regulatory equity (defined as Regulatory Capital Value less net debt) allowed in the regulator's most recent price review, subject to the Company having adequate resources available to fulfil its overall service commitments and its other financial obligations. This includes compliance with the covenants associated with its index-linked bond (which are designed to protect the interests of the Company's creditors).

The Board will consider variations from this base level of ordinary dividend reflecting:

- The overall level of service delivered to customers, compliance with statutory obligations and progress with the delivery of regulatory and other obligations
- Financial performance against regulatory assumptions and internal targets

The Board will explain the way in which these factors have been taken into account in arriving at the dividend declared in the Company's annual report, and other publications, and will refer to any quantitative analysis required by reporting standards in support of such explanations."

Level of dividends for 2020 to 2025

Our dividend policy, when taken in conjunction with the reduction in gearing currently being implemented, leads to the following level of dividends from the appointed business for 2020 to 2025.

Table 1: Dividends from 2020 to 2025

£m, outturn prices	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**
Ordinary dividends proposed from the appointed business	4.033	4.108	4.162	4.194	4.221

These represent a return on regulatory equity averaging 3.8% over the period, well below the nominal base dividend yield of 5% Ofwat has indicated would be reasonable. We consider that our proposals are modest and responsible and support the agenda to increase trust and confidence in the industry.

How we set and pay dividends

Our existing policy makes a very clear statement of linkage between paying a dividend, retaining adequate resources to underpin future delivery of service and other financial obligations, and actual performance against regulatory and other commitments. This will continue for 2020 to 2025 and beyond.

It is already in-line with Ofwat's decisions on 'Putting the sector back in balance'. However, application of the policy is not mechanistic and requires judgement, which is exercised by the Board as a whole when considering recommendations from management on the level of any dividend payment. Judgements involved typically include:

- Forecasts of regulatory equity for the year, which in turn rely upon forecasts of inflation (which determine RCV and bond indexation for the year), of operating and capital investment cashflows (which influence borrowing requirements) and of interest rates (which influence performance against interest cover covenants)
- The overall balance of performance against the pledges made to our customers, which reflect a mixture of financial and non-financial incentives, with account taken of known and forecast performance and relative importance to customers and stakeholders
- Forecasts of headroom against financial covenants relative to the potential impact of cost shocks and other external variables (including the level of demand from metered customers) to ensure that covenants are not likely to be breached and future dividend payments are not ‘locked-up’
- The latest view of financial performance, not only against regulatory allowances (totex and revenue) but also against budgets which are designed to ensure that there are adequate resources available to deliver legal obligations and our pledges to customers.

We consider it an essential part of the good governance exercised by our Board that these types of factors are considered in the round and collectively by the whole Board before any dividend is authorised. We have never found the presence of shareholder representatives at the Board for these discussions to be a bar to open and challenging debate – indeed their presence is essential for effective compliance with the principle of a unitary Board with undiluted responsibility for making all decisions about the governance of the business.

In practice, our existing policy and the way in which it has been applied has led to the payment of reasonable and appropriate dividends. The actual dividends paid since our acquisition by Sumitomo Corporation and Osaka Gas in 2013 are shown below.

Table 2: Past dividends

£m, outturn prices	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**
Ordinary dividends paid from the appointed business	5.125	1.000	3.000	2.800	3.000

Dividends are paid in June (a final dividend for the previous year, after approval of annual accounts) and December (an interim dividend for the current year, after the interim results announcement). Payments are made to shareholders via Group holding companies and the SESW Holding Company, which was established at the time our index-linked bond was issued in order to provide additional ring-fencing protection for the appointed business. Release of the dividend from the SESW Holding Company requires the approval of the independent directors established for this purpose.

Meeting the principles of ‘Putting the sector back in balance’

We consider that our current dividend policy statement meets the principles of Ofwat’s consultation and subsequent decisions on ‘Putting the sector back in balance’. We recognise that there is more than we can do to explain the basis of actual dividend payments made, how they relate to the ’base’ level of dividend and, the rationale for any variations to the base level that has been made.

Explaining actual dividend payments and the judgements involved in arriving at a decision will require a descriptive approach for which the quantitative analysis provided by the recent introduction of Funds Flow Reporting will provide supporting, but not in itself sufficient, evidence. We are developing our approach and plan to implement it prior to 2020.

On the factors Ofwat has indicated will be taken into account in assessing dividend policies included in companies' plans, our proposed approach will meet the criteria in the following ways:

- Delivery to customers – our existing dividend policy is already directly linked to whether customer pledges and other obligations have been met before dividends are declared
- Adjustments to base dividends – we will improve our explanation of the judgements considered by the Board in determining a dividend payment, including whether a variation from the base level of dividend should be made
- Benefit sharing – we do not consider sharing of returns with customers as narrowly defined as reducing customers' bills where an outperformance payment is being considered for shareholders. Our practice for the last three years has been to invest substantially more in retail functions than was allowed in the PR14 Final Determination – an investment necessary to improve our performance in this area and to extend our Water Support Scheme to nearly double the number of customers funded by the PR14 Final Determination, which benefits our customers in preference to enhancing returns to shareholders
- Employee benefits – we have similarly taken a responsible approach to employee benefits, in particular the funding of defined benefit pension liabilities. Our defined benefit pension scheme (which has been closed to new members since 2003) has been funded in accordance with the independent trustees' requirements and actively managed by employer and trustees working co-operatively together, to the point at which the scheme represents a net asset on our balance sheet and no further deficit contributions are required under the latest actuarial valuation. Our wider approach to employee benefits is described in our Remuneration Report and we will continue to do this
- Actual capital structure – our dividend policy already reflects a dividend yield approach, with lower cash payments due to our higher historic level of gearing. The reduction in gearing we are implementing in advance of 2020 will, conversely, increase the quantum of dividend payments – but the rate will continue to reflect the base allowed return on equity included in the PR19 Final Determination. As gearing will be similar to the notional gearing assumed for price setting purposes, a higher base dividend rate is not proposed
- RCV growth – our plan is financeable and we demonstrate that we are financially resilient at least until 2030. We see no need to vary our proposed base dividend to address financeability constraints, having addressed the impact of the profile of capital investment by varying the PAYG ratio year by year (without changing the average PAYG ratio over the five years 2020 to 2025)
- Financial resilience – our plan demonstrates resilience to a wide variety of events with financial consequences (including the scenarios specified by Ofwat) through to 2030 under the dividend policy described. As already noted, funding of pension deficits is not a prominent concern given the level of funding we have provided in the past and the level of funding for liabilities that has now been achieved.

Benefit sharing

Ofwat has published its decision on an approach to sharing outperformance of regulatory assumptions due to higher gearing. We do not consider this benefit sharing mechanism relevant to our plan for two reasons:

1. We are acting to reduce our gearing before 2020 and our projections show that gearing is not expected to rise above 65% during the period. Indeed, our projections of gearing do not approach the 70% threshold for the benefit sharing mechanism to apply at any time up to 2030, the period over which financial resilience has been tested
2. Our actual cost of debt under our index-linked bond is such that, even if the gearing threshold were to be reached, there would be little, if any, benefit to be shared with customers.

We are therefore content to accept the illustrative benefit sharing mechanism set out in the 'Putting the sector back in balance' decision, if actual gearing breaches the threshold required between 2020 and 2025.

Other mechanisms in the PR19 Methodology allow for customer bills to reflect performance throughout the period. In particular, outperformance payments and underperformance penalties will impact customers' bills on an annual basis. This could lead to greater volatility in customers' bills.

We consider that the scope for outperformance, and resulting impact on customers' bills, is limited given the stretching nature of our performance commitment targets (as discussed in the Pledges, incentives and bills Chapter). However, in the event of outperformance payments being earned early in the period, we would expect to consider the prospects for outperformance payments or underperformance penalties in future years before deciding whether to take any outperformance payments in the form of an increase in customers' bills. This would be important not only for avoiding unnecessary and avoidable volatility in bills, but for retaining trust and confidence in our ability to deliver a consistent level of performance. The approach we expect Ofwat to take (based on recent modifications to our licence) to assessing whether in-period outperformance payments should be implemented – in part or in full – are helpful in arriving at a balanced judgement prior to implementing any potential outperformance payments.

In practice a judgement 'in the round' would be needed from our Board, in much the same way as judgements in the round are needed for deciding on the level of dividend to be declared. We consider it in customers' interests to have any sharing of benefits from higher gearing (however theoretical these may be in our case) to be included in such judgements. In practice an approach in the round from Ofwat when considering whether to require companies to implement benefit sharing in any particular year will be helpful.

Long-term financial resilience

Long term financial resilience is just one dimension of resilience in the round, and we describe our overall approach to operational, financial and corporate resilience in the Resilience Chapter. In this section, we provide more detail on how we have assessed our financial resilience through to 2030, including the company-specific factors we have taken into account, the measures we have used as benchmarks for resilience and the remedial measures we have put in place to address severe but remote cost or other shocks to our financial strength – including a signed undertaking from our two main shareholders to provide additional financial support in specific scenarios. We have included a Board Assurance Statement on our financial resilience in the Data strategy and assurance Chapter.

The long-term viability statement published in our Annual Report 2018 explained how the Board had assessed the viability of the Company to 2025, based on our draft Business Plan, and taking account of our current position, performance and the potential impact of the principal risks documented in the strategic report section of the Annual Report.

We have used the same approach for assessing our longer-term financial resilience – to 2030 – based on the Business Plan we are now submitting. Below we detail how we have assessed our current level of financial resilience and the stress tests both prescribed and company-specific that we have applied.

Assessment of current financial resilience

The assessment criterion we have used for testing the potential financial impact of scenarios, both before and after mitigating actions, is our ability to comply with the financial covenants associated with our £100m index-linked bond. These covenants generally impose tighter financial constraints than the metrics used by the independent credit rating agencies. Annual compliance with financial covenants is subject to external assurance and certificates of compliance with the broader covenants associated with the index-linked bond are issued annually to the independent Controlling Finance Party.

The financial covenants are designed to protect the interests of bond holders from any weakening of our financial strength that might jeopardise annual interest payments or repayments of principal when they become due. This is achieved by control of the release of dividends by a special purpose holding company – with independent directors – between the appointed business and its beneficial owners and the obligation to certify annual compliance with covenants before dividends are released. Thus, failure to comply with covenants will lead to an immediate and effective prohibition of dividend payments until the situation has been rectified.

Our Business Plan complies with the obligations of these financial covenants, which apply to our actual financial structure. There is little difference between our actual and the notional structure adopted by Ofwat due to our actions to reduce borrowing and increase equity. The principal difference between the two structures is the composition of external debt and the interest rate assumed to be payable on that debt. Ofwat's notional structure adopts interest rates materially lower than the interest rate actually payable on our historic borrowings. Our actual capital structure, reflecting the interest rates we will actually incur, therefore poses the more stringent test of our long-term financial viability.

Our Business Plan shows that we will comply with the bond covenants specified for the submission of a plan to Ofwat not only for the period up to 2025, but through to 2030. These covenants are tighter than those that operate on a year to year basis and are specifically designed to ensure that there is headroom to provide financial resilience against unplanned events. The annual ratios shown in our business plan data tables are:

Table 3: Key ratios for compliance with financial covenants

		Minimum	2020/21	2021/22	2022/23	2023/24	2024/25
Interest cover ratio	Ratio	1.6	1.92	1.90	1.90	1.89	1.90
Adjusted interest cover ratio	Ratio	1.0	1.01	1.01	1.01	1.01	1.01
Regulatory asset ratio	%	75.0%	70.0%	71.7%	72.5%	72.6%	72.6%

The regulatory asset ratio (gearing) is higher than the level of regulatory gearing normally quoted because the definition associated with these financial covenants disregards cash balances other than those held in ring-fenced accounts specified by the bond documentation. However, the key constraining ratio is the adjusted interest cover ratio, which takes into account the indexation charge for our index-linked bond. With the move to the Consumer Price Index (CPIH) for the indexation of most wholesale revenues, the higher Retail Price Index (RPI) index for our principal external borrowing facility requires additional borrowing to be undertaken at key measurement dates (31 March and 30 September) to avoid breaching this covenant.

There is, however, some £24m of additional borrowing capacity up to the threshold of 80% gearing that applies for management of financial compliance during the course of the year. (The difference between the 75% maximum gearing permitted for a business plan submission and the 80% applicable during the course of a year being the headroom capacity built into covenants to accommodate cost or revenue shocks). The position is essentially the same for the subsequent five years, with gearing reaching a maximum of 73.5% in 2027. This leaves additional borrowing capacity of £23m for 2025 to 2030.

Prescribed scenarios for stress testing financial resilience

We have considered whether this additional borrowing capacity provides adequate headroom for the cost shocks that might arise, both in isolation and in combination. As we did for our 2018 Long-Term Viability Statement, we have assessed the impact of the stress testing scenarios prescribed by Ofwat in its decision on 'Putting the sector back in balance'. The impact is shown below.

Table 4: Impact of prescribed scenarios

(£m, in outturn prices)

	Ofwat's Prescribed Scenarios	Additional Debt		Remaining Headroom		Additional Equity	
		AMP7	AMP8	AMP7	AMP8	AMP7	AMP8
1	10% Totex overspend over 5 years	+ 29.4	+ 29.8	No Headroom		+ 5.5	+ 26.7
2	ODI penalty (3% of RoRE) in 1 year	+ 3.1	+ 3.5	20.4	16.6	-	-
3	1% inflation increase over 5 years	+ 9.7	+ 10.7	17.1	13.0	-	-
4	1% inflation decrease over 5 years	- 10.2	- 9.4	28.7	32.5	-	-
5	5% increase in bad debt over 5 years	+ 0.0	+ 0.0	23.3	23.0	-	-
6	2% increase in interest rates	+ 4.5	+ 6.0	19.8	16.2	-	-
7	Penalty (3% of revenue) in 1 year	+ 1.9	+ 2.8	21.4	18.8	-	-
8	Intercompany Financing Scenarios	-	-	-	-	-	-
9	Combined Scenario	+ 41.1	+ 41.8	No Headroom		+ 17.0	+ 39.0

(*) 'Remaining Headroom' represents the minimum amount of headroom within each year of the AMP

The stress tests adopted here assume the full impact of the prescribed scenarios rather than the 10th and 90th percentile impacts included in the more detailed data tables accompanying our plan to ensure consistency with our approach to company-specific scenarios.

Even with the lower level of gearing reflected in our plan, the stress tests would require additional borrowing in six out of the nine prescribed scenarios to address breaches of the Adjusted Interest Cover Ratio (AICR). The only scenarios where additional borrowing is not required are for the impact of other activities within the Group on the appointed business (which are considered effectively eliminated by the current ring-fencing arrangements, including those associated with our bond covenants), a 5% increase in bad debt (which starts from the Company's exceptionally low level of projected bad debt charge) and for a lower inflation scenario (which effectively eliminates any bond indexation charge).

Table 4 shows the level of additional borrowing needed to fund the cost or revenue shocks in full and whether there is the capacity to incur the additional borrowing without breaching the relevant financial covenants. Given the reduced gearing incorporated into our plan, in most scenarios additional borrowing can be accommodated to offset the higher levels of expenditure or lower revenues without needing to cut dividends or seek additional equity injections.

However, the two most testing scenarios of 10% overspend of operating and capital expenditure each year, and the 'combined' scenario (with annual totex overspends, annual ODI penalties equivalent to 1.5% of RoRE and financial penalties equivalent to 1% of turnover in both 2020/21 and 2025/26), require such substantial increases in funding that additional equity of £17m over 2020 to 2025 and £39m over 2025 to 2030 would be required. This has been shown as additional equity but would in practice be achieved through a combination of suspending dividend payments and direct equity injections.

This level of funding to address such extreme scenarios assumes, however, that no actions would be undertaken – or would not be possible – to avoid the scenarios arising in the first place, or at least to mitigate their impact. For example, a 10% overspend on both operating and capital expenditure in each year would prompt vigorous management intervention, including deferral of capital expenditure and reductions or elimination of dividend payments, as soon as the prospects of an overspend of this magnitude were forecast. In extremis we would also seek to rely on the Substantial Adverse Effects clause in our licence to seek a re-opening of the PR19 Final Determination (as we did in the 2005 to 2010 period when hit by a combination of an increase in power prices and a reduction in metered revenue).

Company-specific scenarios for stress testing

We have considered the nature and magnitude of potential cost shocks specific to our own circumstances, drawing on the latest version of our corporate risk register (as used to underpin our risk management statement in our Annual Report 2018) as well as cost shocks that might not appear on the register.

The risk register categorises as 'very high' any risk with a potential impact of over 7% of turnover (£4.5m), a 'very significant' impact on our ability to meet our aims or 'significant' impact on our reputation. They are then given red, amber or green status. The only red risk is cyber security, but the ambers include:

- Compliance with legal obligations
- Water supply shortage
- Water quality failure
- Loss of large numbers of staff
- Retention and development of high quality staff
- Regulatory compliance
- Legitimacy.

For the purposes of this stress testing exercise the potential financial impact of these have been quantified as follows:

- Cyber attack (red risk) – receive a fine for extensive loss of customer data – 4% of turnover (£2.5m)
- Compliance with legal or regulatory obligations, legitimacy and a water supply shortage (amber risk) – the additional costs have been addressed in the prescribed stress tests shown in Table 4
- Water quality failure (amber risk) – a major quality incident affecting 80,000 customers, triggering compensation payments of £50 per customer (£4m) and uninsured additional costs of working (total cost £6m)

- The loss of large numbers of staff or a failure to retain and develop high quality staff (amber risk) – assessed as requiring 100 temporary staff for two months at £400 per person per day (£2.4m).

The highest cash impact, therefore, of risks currently included on the corporate risk register is £6m.

Five other potential scenarios have been identified:

1. The impact of a cost shock such as that which we encountered in 2005 to 2010, when power prices rose rapidly to levels substantially above those anticipated in the PR04 Final Determination. This was the scenario used to stress test our PR14 Business Plan submission, by assessing the range of operating costs actually experienced over a number of years. A £4m increase over average operating expenditure has been observed in the year of greatest impact in the past (2009/10)

2. The impact of delivering only 50% of the efficiency benefits assumed in our plan – increasing operating costs by £1.5m a year over 2020-25 and adding 5% (£6m) to the cost of delivering the capital programme

3. One-off fees associated with variations in the steps that need to be taken to prepare for redemption of our bond (between 2027 and 2031), specifically a waiver of the sinking fund requirement in our covenants from 2022, estimated to cost £4.2m

4. The need to resume deficit payments on our defined benefit pension scheme, or an outcome to the current consultation which results in the scheme not closing to future accrual. Deficit payments equivalent to those being made under the 2014 valuation would cost £0.6m a year – or potentially £3.0m over five years – and keeping the scheme open could cost an additional £3.5m over 2020-25

5. Fees associated with the ultimate redemption and replacement of the bond. The pre-paid fees when the bond was originally issued were c.13% of the sum raised (to obtain the benefit of the insurance wrap on the original issue). The replacement of the bond would be phased over five years and an insurance wrap is not envisaged at this time – so a much more modest outflow for fees might be anticipated, assessed at a one-off outflow of £2m.

The impact of these company specific potential additional cost risks on our headroom under our constraining financial covenants is shown below.

Table 5: Impact of company specific scenarios

	Company Specific Scenarios	Impacts		Additional Debt		Remaining Headroom		Additional Equity	
		AMP7	AMP8	AMP7	AMP8	AMP7	AMP8	AMP7	AMP8
1	Cyber attack fines - 4% of Turnover	- 2.7	- 3.1	+ 2.7	+ 3.1	**20.6**	**17.4**	-	-
2	Water Quality Failure	- 6.4	- 7.1	+ 6.4	+ 7.7	**16.8**	**9.0**	-	-
3	Loss of high quality staff	- 2.6	- 2.8	+ 2.7	+ 3.0	**20.6**	**17.5**	-	-
4	OPEX underperformance - Historical	- 3.9	- 3.9	+ 3.9	+ 4.2	**19.3**	**15.0**	-	-
5	AMP6 Efficiency Programme failure	- 15.6	-	+ 16.0	+ 0.8	**8.3**	**6.7**	-	-
6	Bond Sinking Fund waiver requirement	- 4.2	-	+ 4.2	+ 0.2	**18.7**	**18.8**	-	-
7	Pension costs on DB scheme	- 7.2	- 6.4	+ 7.4	+ 8.5	**16.9**	**11.8**	-	-
8	Redemption costs for Index Linked Bond	-	- 2.0	+ 0.0	+ 2.1	**23.3**	**20.8**	-	-
9	Combined Scenario	- 22.2	- 7.0	+ 22.8	+ 0.6	**1.5**	**0.2**	-	-

(*) 'Remaining Headroom' represents the minimum amount of headroom within each year of the AMP

The £23.3m of headroom in our plan to 2025 clearly provides adequate cover for these shortfalls individually – and in credible combinations, including, for example, the full 50% shortfall in savings from our current efficiency programme, a variation in operating expenditure equivalent to that experienced in the past and a fine for a failure to protect personal data under a cyber attack (£22.8m increased borrowing in total).

While gearing under the bond covenants and the available headroom remains similar during 2025 to 2030 (at 73.5% and £23m), the period over which cost shocks might emerge (and therefore need to be accommodated) has clearly doubled. Additionally, while some of the cost shocks are one-off risks, the impact of a failure to deliver efficiencies, the sorts of price shocks experienced historically, or the sorts of events envisaged on the Risk Register are increased. Similarly, the period over which stress tests need to be accommodated, and therefore the likelihood of occurrence, has increased. There is therefore, additional pressure on our long-term financial resilience.

So, although we have adequate headroom for most plausible scenarios and combinations through to 2030, the Board considers that additional headroom might be needed because the probability of more than one event or combination of events occurring increases with the longer time horizon being considered. The Board has therefore sought – and obtained – a signed undertaking from our two main shareholders – and the intermediate holding company Boards – of their intent to provide financial support in the scenarios described to ensure that we are able to continue financing our functions and providing services to customers. A copy of the signed undertaking is available in Appendix A5.4 – Form of undertaking for AMP8 headroom.

On the basis of this assessment of potential calls on the headroom we have available within our plan and the accompanying longer-term projections, together with the contingent support we have from our shareholders, we will be resilient on our planned capital structure (and by implication on the notional structure used for price setting purposes) through to 2030. A copy of our Board Assurance Statement confirming this is in the Data strategy and assurance Chapter.

Our Pay As You Go (PAYG) and RCV run-off rates

After consultation with our Customer Scrutiny Panel, we have used the flexibility provided by the PAYG ratio to smooth bill profiles, whilst retaining the same average value for the PAYG ratio over the five-year period. This average value is based on the ‘natural’ proportion of operating expenditure to totex. Tables 6 and 7 show the calculation of the ‘natural’ rate and how this has been modified for the network plus control to achieve a smoother bill profile. Our water resources PAYG ratio has not been modified in this way, on the basis that modifications to achieve a more acceptable bill profile is appropriate for a monopoly service but could interfere with market signals in the potentially competitive market for water resources.

Table 6: Network plus PAYG rate

2017/18 prices		2020/21	2021/22	2022/23	2023/24	2024/25	2020-25
Opex	£m	22.783	22.378	21.997	21.255	20.751	109.164
Capex	£m	26.185	31.311	26.447	21.670	21.193	126.806
Grants and contributions	£m	(1.181)	(1.265)	(1.198)	(1.209)	(1.097)	(5.950)
Totex	£m	47.787	52.424	47.246	41.716	40.847	230.020
'Natural' PAYG ratio	%	47.7%	42.7%	46.6%	51.0%	50.8%	47.5%
PAYG ratio used for prices	%	48.1%	42.7%	45.5%	50.6%	51.7%	47.4%

Table 7: Water resources PAYG rate

2017/18 prices		2020/21	2021/22	2022/23	2023/24	2024/25	2020-25
Opex	£m	3.943	3.868	3.796	3.607	3.505	18.719
Capex	£m	0.924	1.060	0.876	0.843	0.867	4.570
Totex	£m	4.867	4.928	4.672	4.450	4.372	23.289
'Natural' PAYG ratio	%	81.0%	78.5%	81.3%	81.1%	80.2%	80.4%
PAYG ratio used for prices	%	81.0%	78.5%	81.3%	81.1%	80.2%	80.4%

The minor difference between the aggregate ‘natural’ PAYG amount and that adopted for price setting purposes (£70k or less than 0.1% of aggregate operating expenditure over the five years) arises simply from rounding differences and is not material to prices.

The same RCV run-off rates have been used for both the water resources and the network plus controls, as shown below.

Table 8: RCV run-off rates

		2020/21	2021/22	2022/23	2023/24	2024/25
Run-off rate for RPI-linked RCV	%	6.95%	6.95%	6.95%	6.95%	6.95%
Run-off rate for CPIH-linked RCV	%	7.02%	7.10%	7.15%	7.23%	7.29%

The difference in the run-off rates between RPI- and CPIH-linked RCV (and the increase in CPIH-linked run-off rate over the period) arise solely from the need to recognise the impact of the move to CPIH on the amount included in customers’ bills for the use of assets and is based on a ‘wedge’ between RPI and CPIH of 1%.

The underlying (RPI-linked) run-off rate has been based on the average of the actual capital maintenance charges included in the current cost financial statements in our regulatory accounts for the last three years, expressed as a percentage of the RCV, as shown below.

Table 9: Run-off rate as a percentage of RCV

		2015/16	206/17	2017/18	Average
Capital maintenance charges	£m	15.780	15.836	17.403	
RCV	£m	221.572	234.069	250.031	
Run-off rate	%	7.12%	6.76%	6.96%	6.95%

The current cost capital maintenance charge is an appropriate measure for determining the run-off rate because it incorporates the impact of inflation and the run-off rate is applicable to an asset base (the RCV) which is indexed by a measure of inflation each year.

Return on Regulatory Equity (RoRE)

Return on regulatory equity in our base case

As explained earlier in this chapter, we have adopted the indicative Weighted Average Cost of Capital (WACC) published by Ofwat in their final methodology statement for this price review, with a variation to the allowed cost of debt to reflect the unavoidable additional costs faced by a small company such as ourselves. The CPIH-linked real cost of capital for wholesale is therefore 3.45%. Within this, the allowed real return to our equity investors is 5.03% (or 4.01% on an RPI-linked basis). Our ‘base case’ return on regulatory equity rises from 4.52% in 2020/21 to 4.73% in 2024/25, as the proportion of the allowed RCV linked to CPIH increases through the period (50% of the RCV existing at 1 April 2020 remains linked to RPI throughout the 2020 to 2025 period, while the other 50% and all new additions to the RCV are linked to CPIH). The average return to regulatory equity (RoRE) for the appointed business as a whole in our proposed plan is therefore 4.63%. This is shown in Figure 1 below.

Figure 1: RoRE

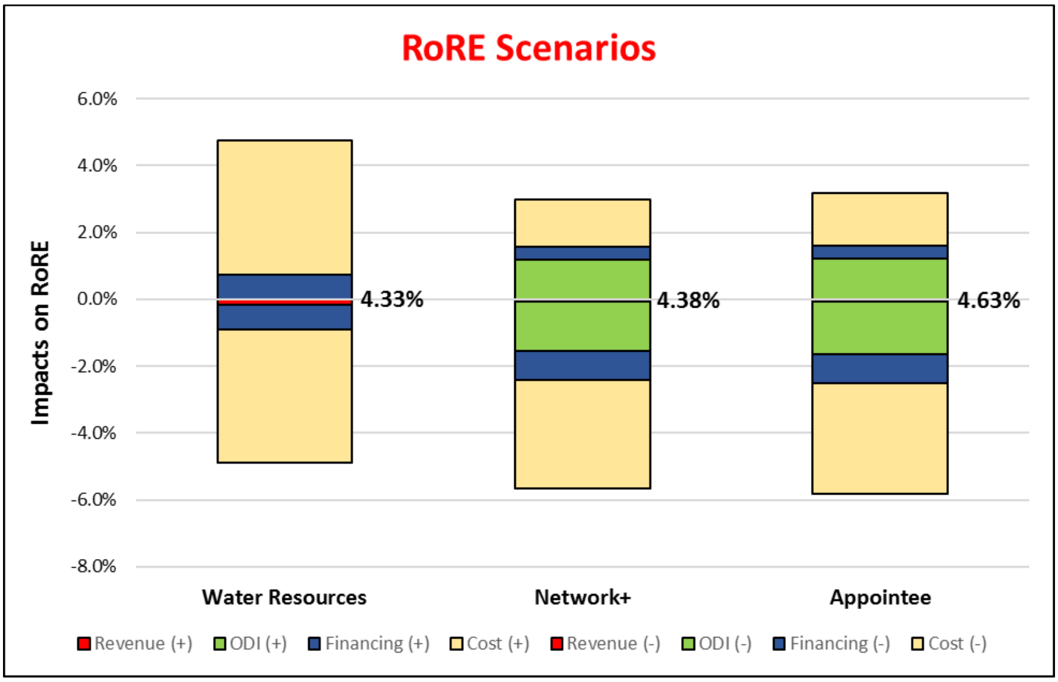


Figure 1 also shows the water resources and network plus components of this overall return. Both are marginally lower than the average return for the appointed business in aggregate as they exclude the allowed margin on household retail activities. This has been set at a level equivalent to 0.1% on the WACC, or between 0.17% and 0.21% on the allowed cost of equity (depending on whether this real return is assumed to be linked to RPI or CPIH). The average gap over the 2020 to 2025 period between our proposed return on regulatory equity for the appointed business as a whole and the network plus price control is 0.25%, reflecting the impact of debt (bank overdrafts) assumed to be carried in the household retail price control unit in the first three years.

Our approach to assessing the impact of uncertainty

We have already described earlier in this chapter our approach to assessing our financial resilience in the period up to 2030 and the factors that our Board has taken into account in determining whether our plan provides for adequate headroom to accommodate remote but severe financial shocks. We have also described the mitigation measures we would expect to implement if such shocks were to start to materialise – and the level of resilience our Board has considered is needed to ensure that we are able to continue carrying out our functions even in extreme scenarios.

The RoRE assessment takes a different approach, by considering the probability as well as the magnitude of potential financial shocks. This approach involves assessing the potential impact of events that have a one in ten chance of occurring – whether they enhance returns to equity (for, by example, earning additional payments for outperforming targets that have financial incentives, or benefitting from interest rates lower than those assumed in the allowed cost of capital), or reduce returns (for, by example, incurring higher costs than allowed to deliver the performance commitment targets).

The RoRE assessment also only takes into account two likely values for the upside and downside impact of events under the twelve common headings shown below:

1. Financing
2. Revenue
3. Water trading incentive revenue
4. Water trading incentive export revenue
5. Outcome Delivery Incentives (excl. C-MeX and D-MeX)
6. Costs
7. Water trading export costs
8. Costs including uncertainty mechanisms
9. D-MeX
10. Retail revenue
11. Retail costs
12. C-MeX

Some of these parameters are not applicable to our plan:

- Our plan does not include new water trading proposals (either imports or exports), and therefore factors 3,4 and 7 above are not applicable
- We are not including any uncertainty mechanisms and therefore the impact of factor 8 is the same as the impact of factors 6 and 11.

Other factors and particularly factor 6 (which we have used for wholesale expenditure variations), cover a number of potential impacts that have been considered individually as well as collectively in our approach to determining financial resilience. We have therefore considered the maximum likely impact of the range of factors and concluded that the combined company specific scenario we have used for testing our long-term financial resilience should be adopted for this RoRE analysis.

We have also needed to consider the probability as well as magnitude of the potential financial impacts we are testing for this RoRE analysis. The working assumptions we have adopted for this purpose are:

- For events that have a one in ten chance of occurring, we have assumed 90% of the maximum potential impact
- For events that are more remote, we have assumed 50% of the maximum potential impact might crystallise once in ten years.

Full details of the breakdown of the company specific combined cost shock scenario are included in Appendix A12.2 - Business Plan data table commentary (see App26). Where single events have been included in the testing, we have generally included these in the network plus price control.

Impact of uncertainty on the RoRE range

Table 10 below is an extract from the Ofwat financial model and shows the impact of the factors tested on the RoRE range (greyed out cells indicate that the factor does not impact upon the particular price control).

Table 10: RoRE sensitivity

Sensitivity Cases	Appointee	WR	WN
Base case	4.63%	4.33%	4.38%
Financing upside	0.39%	0.74%	0.37%
Financing downside	-0.85%	-0.74%	-0.85%
Revenue upside	-	-	-
Revenue downside	-0.08%	-0.16%	-0.08%
ODI upside	1.08%	-	1.13%
ODI downside	-1.29%	-	-1.36%
Cost upside	1.56%	4.00%	1.43%
Cost downside	-3.30%	-4.00%	-3.27%
D-Mex upside	0.05%		0.06%
D-Mex downside	-0.11%		-0.11%
Retail revenue upside	0.15%		
Retail revenue downside	-0.15%		
Retail costs upside	0.43%		
Retail costs downside	-0.43%		
C-Mex upside	0.09%		
C-Mex downside	-0.18%		

Further details of all the factors taken into account – not just the breakdown of wholesale costs – are provided in the business plan data table commentary. Brief explanations of the key impacts are given below. The cumulative impact of these individual ranges on our potential RoRE is shown in Figure 1 (above).

Financing:

We have assumed a 0.8% variation in LIBOR rates for both upside and downside scenarios. However, as the overwhelming majority of our borrowing (after the reduction in gearing being implemented prior to 2020) will be our index-linked bond, whose coupon is fixed and does not vary with LIBOR, the impact on borrowing costs is small. The downside scenario also assumed the potential impact of negotiations for a waiver of the sinking fund requirement on our index-linked bond.

Revenue (wholesale and retail):

We have assumed modest penalties from forecasting errors under the Water Revenue Forecasting Incentive Mechanism (even though our record of accurate forecasting of wholesale revenues under the mechanism has been very good so far), and a variation in customer numbers under the household retail revenue control.

Outcome Delivery Incentives (ODIs):

Our approach to incentive rates for ODIs with a financial incentive is described in the Pledges, incentives and bills Chapter. The potential impact at P10 and P90 is within the range expected under the PR19 Methodology, with a bias towards the downside (reflecting the stretching nature of the performance targets we are proposing).

Costs:

We have assumed P90 values for the combined company specific scenario, including a failure to deliver 50% of our current efficiency programme, a cost shock equivalent to that seen historically and a fine for a failure to protect personal data following a cyber security incident. The P10 values are based on the variation in operating expenditure we have experienced in the past.

D-MeX:

We have assumed a symmetrical upside and downside relative to the expected upper quartile performance, which leads to twice the downside impact compared to the upside because the maximum penalty is twice the maximum outperformance payment (5% and 2.5% of developer service revenue respectively).

Retail Costs:

We have assumed equal probabilities of 7% under-and over-spends on allowed cost to serve, based on the historical variation in our actual retail household cost to serve.

C-MeX:

We have assumed a maximum potential penalty (12% of household retail revenue) and a maximum potential outperformance payment (6% of household revenue) which doesn’t include an enhanced outperformance payment.

Key points to note are:

- Downsides for all three units (water resources, network plus and appointee overall) are greater than potential upsides and create negative returns to equity if all downsides crystallise together
- Downsides on all measures (revenue, ODIs, financing and costs) are also greater than the upsides on the same measure
- The greatest RoRE range is actually on the smallest unit (water resources), where the relationship of variable costs to the equity base is highest, even though the majority of company-specific costs have been allocated to the network plus unit
- Variations in costs have by far the biggest impact on returns, notwithstanding that the strength of financial incentives on ODIs are within the range expected by the PR19 Methodology.

Conclusions from the RoRE analysis

The prescribed RoRE analysis serves to confirm the key features of the risk to equity returns expected under the PR19 methodology.

1. There is more downside than potential upside for returns to equity in our plan
2. ODI incentives have strengthened – and contain more downside than upside – but are still not as strong as the cost challenges incorporated in our plan
3. Revenue and financing variability are, by contrast, relatively modest in comparison to ODIs and cost variability.

With a higher equity base (after the action we have taken to reduce gearing), the quantum of risks to shareholder returns have increased substantially – an inevitable consequence of the more challenging service and efficiency targets expected under the PR19 Methodology.

Conclusion

We are reducing our level of gearing to below 60% ahead of 2020 by reducing our level of net debt and increasing regulatory equity. Our plan is based on a firm financial footing and is resilient to a range of risks and potential cost shocks up to 2030 and assurance of additional funding from shareholders has been secured under specific scenarios.

Our plan is based on a wholesale WACC of 3.45%, reflecting the unavoidable additional costs that we incur in raising debt financing due to our relatively small size and the infrequency with which we raise substantive debt. We have unequivocal support for this from our customers.

We are boosting our already strong and customer-focused dividend policy by committing to increase the transparency of decision-making associated with the level and timing of shareholder returns. Dividend levels will continue to be modest and below the nominal base dividend yield of 5% indicated by Ofwat as a reasonable yield.

We have used the flexibility provided by the PAYG ratio to smooth bill profiles, whilst retaining the same average value over the five-year period.

CHAPTER 6

Governance

Being transparent and accountable is important to us and our customers

In this chapter you will hear about

- Ofwat's four principles on board leadership, transparency and governance and the activity we already carry out for each.
- The enhancements we will make to further various aspects of board leadership and transparency, including board interaction with our workforce and accessibility to documents explaining our governance, finances and strategy.
- How we will ensure the way we are owned and run is clear to customers.

Governance

As a monopoly company we are in a privileged position, which is why we have always taken a proactive approach to our corporate governance and the transparency of our decision making. We recognise how important this is in ensuring the trust and confidence of our customers and the legitimacy of our Company and the wider industry.

Our ongoing focus on this area means we are well positioned to respond to the increased level of scrutiny that the industry is facing and indeed we are already achieving many of the key actions identified by Ofwat in its board leadership, transparency and governance principles consultation. However, we recognise the importance of the Government and Ofwat's reform agenda that is currently being implemented, and our plan further increases our efforts to address issues around leadership, transparency and building the trust of our customers.

In this chapter we will focus on the four principles of good board leadership, transparency and governance:

Principle	Objective
Purpose, values and culture	The Board of the regulated water company sets the purpose, culture and values for the organisation, reflecting its position as a monopoly provider of an essential public service.
Board leadership and transparency	The Board's leadership and approach to transparency and governance engenders trust in the company and ensures that they can be held accountable for their actions.
Act as a stand-alone regulated company	The Board of the regulated water company has the power to set its long-term direction, and to make, and be accountable for, all decisions regarding its regulated activities as though these are substantially its sole business.
Board effectiveness	Boards and their committees are competent, well run, and sufficiently independent, ensuring that they can make high quality decisions that address diverse customer and stakeholder needs.

For each principle we will set out:

- The best practice activity and measures we currently and will continue to take for 2020 to 2025
- The proposed enhancements to our corporate governance for 2020 to 2025 in-line with Ofwat's, 'Putting the Sector Back in Balance' agenda.

We also set out our longer-term approach to sustainability and long-term resilience within our corporate governance framework.

Purpose, values and culture

Current and continuing best practice for 2020 to 2025

The Board's main role is to ensure our Company is run properly, in accordance with our regulatory and other obligations, for the benefit of our customers and to create long-term value for shareholders.

The Board has significant involvement in guiding our strategic direction and ensuring it is aligned to our vision of being an outstanding water company that delivers service excellence. It signs off our strategic objectives and ensures that the necessary financial and other resources are made available to enable management to meet those objectives.

This will continue from 2020 to 2025, with the Board dedicating time to review the overall strategy and provide views on, and where appropriate challenge, tactical initiatives proposed to improve the customer experience, implement operational efficiency, deliver innovation and ensure that the most appropriate and efficient capital investments are made for the longer-term. This will ensure that our strategic direction remains aligned to delivering service excellence, affordable bills and operational, corporate and financial resilience.

Our strategic direction and associated short and long-term tactical initiatives have directly informed the focus and direction of our Business Plan for 2020 to 2025 and are aligned to our overall aim of being a respected and successful local company that has the confidence of our customers, supports our employees and acts responsibly.

The Board's role also involves ensuring that we are acting in the wider public interest. The development of our Business Plan has involved continued dialogue with our customers, stakeholders, regulators and shareholders and we have aligned our plan to their priorities. Our activity has been reviewed and challenged throughout by our Customer Scrutiny Panel (CSP) with one of our independent non-executive directors responsible for oversight of the customer engagement activity. This approach will continue as we deliver our Business Plan.

Our Annual Report 2018 explains the Board's activities and key actions taken. It also contains details of the Board's view on our strategic direction, delivery of its objectives and performance.

Enhancements for 2020 to 2025

We will have a stronger focus on ensuring our independent non-executive directors work closely with our management and external stakeholders to ensure their views are considered as we deliver the pledges in our Business Plan, and that the wider Board continues to ensure that our culture is consistent with our purpose. All these items will form part of future Board agendas and strategy days.

We will appoint a designated independent non-executive director to lead on engagement with our workforce, including involvement in one Joint Negotiating and Consultative Committee meeting each year, to help ensure employees input into key policies, practices and publications.

We will invite all members of our CSP to attend one Board meeting in the year.

Board leadership and transparency

Current and continuing best practice for 2020 to 2025

The Board will continue to comply with the Disclosure and Transparency Rules and seek to explain the way in which we are governed in an open, accessible and balanced manner. This includes our relationship with any associates, including holding companies. Our group structure is clearly explained in our annual report and we operate a UK-based holding company.

Full details of our executives' pay, benefits and bonuses are published annually. This sets out a clear explanation of our executive pay policy and the criteria used to award short- and long-term bonuses and incentives. Our annual bonus is already directly linked to performance against our current performance commitments.

We also report annually on our dividend policy and the dividends paid to our shareholders which are linked to our overall level of performance. Detail on our dividend policy and consideration of further transparency on the key judgements underlying this policy are detailed in the Financing Chapter.

Full details of the membership of the Board and associated committees, key roles and responsibilities of each Board member, meeting frequency and attendance are all published in our annual report. We also report on how the Board has spent its time over the year.

We have implemented a number of new initiatives in recent years to increase the transparency of business decisions and our governance. These also include increased transparency for our employees on the key decisions being reviewed and made by the Board, and a series of ongoing 'round table' discussions between directors and employees that are centred around these transparency matters.

Enhancements for 2020 to 2025

We have taken the results of Ofwat's recent consultation on sector balance issues very seriously and are committed to addressing them comprehensively by:

- Explaining how we will lower our level of gearing from 77% to below 60% by 2020
- Setting out how we will manage financial outperformance
- Enhancing the transparency of our decision making around dividend payments
- Showing how we have tested and plan to increase our financial resilience.

Further details on the changes being made can be found in the Financing Chapter.

Our Annual Report 2018 provides details of the links between executive pay and incentives to performance, and in particular we describe the annual bonus scheme targets that apply to executive directors and senior management. These criteria reflect key elements of business performance that are fully aligned to our customers' interests, including operational targets on leakage and supply interruptions, together with our SIM ranking, financial resilience and health and safety targets. We consider the targets set against these criteria to be stretching and truly reflective of the public service nature of our sector. Our Annual Report 2018 also provides details of other key elements of our executive incentive schemes, including our long-term incentive plan which rewards performance against longer-term targets which support the strategic direction of the Company and – we believe – the longer-term focus of our customers. The Remuneration Committee continues to rigorously apply these criteria when determining executive remuneration, with transparent disclosure of amounts earned against potential maximum and minimum ranges.

Through our Remuneration Committee, we are committed to continuously reviewing executive pay policies over time and it will be considering whether the balance of the pay criteria noted above is weighted in a way that maintains focus on customer-centric incentives. We will ensure that where our remuneration policies develop and change, we will explain the reasons in our annual reports.

We firmly support Ofwat's programme of work on revised board leadership, transparency and governance principles which will enable the water sector to ensure it upholds the highest standards of corporate governance as expected from companies that deliver such an essential public service. We are supportive of the principles laid out in the recent consultation and the concept of allowing the flexibility to explain individual circumstances in relation to governance matters.

It is our intention to further enhance the transparency of our activity by publishing summary Board minutes and standing agendas for Board and Committee meetings and, each year, we will publish a dedicated 'Our governance and finances explained' document to increase the accessibility and transparency of information.

Act as a stand-alone regulated company

Current and continuing best practice for 2020 to 2025

Our Board will continue to govern the Company from 2020 onwards in accordance with the standards applicable to an independent company listed in the UK, focusing exclusively upon our long-term interests.

The Board has defined matters it reserves to itself and has full powers to make decisions on behalf of the Company. The matters for Board approval are detailed in our annual reports. Our ultimate holding company – Sumisho Osaka Gas Water UK Ltd – in the UK also applies a code on governance.

Each of the Board committees report into the Board. Final decisions affecting the Company have to be made by the Board and will continue to do so.

Enhancements for 2020 to 2025

In addition to the full Board, we will maintain as a minimum Nomination, Audit and Remuneration Committees on which independent non-executive directors form a majority. The Board will continue to respond to external developments in an agile manner, setting up special purpose committees to address key matters as they arise. Currently, we intend to maintain our Board energy, pension and PR19 financing (which will move to PR24) committees which have independent non-executive director chairs.

We also formed a separate governance committee to consider recent Ofwat consultations on board leadership, transparency and governance, together with recent updates to the Governance Code and related guidance from the Financial Reporting Council (FRC), which will be maintained.

Board effectiveness

Current and continuing best practice for 2020 to 2025

Strong corporate governance relies on the chair and non-executive directors being independent of management and investors. We ensure there is clear division between running the Board and executive responsibility for running the Company, having published responsibilities for the chairman, the senior independent non-executive director, the managing director and the company secretary.

Our independent non-executive directors are critical to ensuring that activity and decisions are constructively challenged, help develop proposals on strategy and bring strong, independent judgement, knowledge and experience to the Board's deliberations. Our three independent non-executive directors are all of exceptionally high calibre with extensive experience in their relevant fields, and on a par with their equivalents across the water industry. One of these independent non-executive directors has been appointed as a senior independent non-executive director, able to act inter alia as a channel for Board communication with regulators. The Board also comprises two executive directors, two shareholder representatives and a non-executive chairman. As part of our Business Plan, independent non-executive directors will continue to form the largest single group on the Board.

The Board ensures that its non-executive directors are of sufficient calibre and number to ensure their views carry significant weight in the Board's decision making. We have found that the composition of the Board, with its mix of executive, independent non-executive and shareholder nominated non-executive directors, has proved effective in ensuring that all stakeholder interests can be addressed and reflected in decisions taken by the Board on all matters of strategy, policy and planning. We will continue to ensure the calibre of our non-executive directors is maintained through a rigorous succession planning and selection process, details of which will be provided in our Annual Report when new appointments are made. The Board's Nomination Committee is responsible for ensuring the composition of the Board and the skills and experience required from new appointments.

All Board members receive an appropriate induction to the Company and we will continue to place importance on training and developing our directors. The Board receive regular updates on legislative, regulatory and other governance developments, including briefings from external specialists as appropriate. The Board will also continue to periodically visit our operational sites and have access to senior management to gain further understanding of policies, practices and procedures.

Regular evaluation of our Board will continue to follow good governance practices. We currently carry out assessment of Board performance every two years and report on progress against key actions through our annual reports. Our Board chairman reviews the performance of the individual non-executive directors and our managing director annually and in turn the senior independent non-executive director reviews the chairman's performance every year. These reviews include stakeholder input, such as from the chairs of Ofwat and the CSP.

We've incorporated the feedback from recent Board evaluations to improve our governance procedures in advance of 2020. These include:

- Formal review of Board powers on an annual basis

- Continuing with an annual Board strategy day, with a review in the coming year to ensure appropriate time is being allocated to strategic matters during Board meetings
- Additional interaction with the Board and our employees on Company strategy
- Increasing the number of deep dive sessions at Board level on key company risks
- Additional training slots for non-executive directors within the annual Board programme
- An expansion of succession planning review by the Nomination Committee, to go beyond executive and senior managers to business-critical roles.

Enhancements for 2020 to 2025

We will use an external facilitator to periodically evaluate Board effectiveness and identify key areas of focus.

We will continue to enhance the role of our independent non-executive directors, with individual focus on key areas such as health and safety, significant capital projects, customer service and governance. Ensuring that the knowledge, focus and expertise of our independent non-executive directors is used in the most appropriate and advantageous way is key, such that our independent non-executive directors can champion specific focus areas for the Company.

Longer-term sustainability and resilience within corporate governance

A key change from previous business plans is a focus on how effective corporate governance can directly improve our longer-term sustainability and resilience. At both a Board and senior management level, we have considered the recent work carried out by the think-tank Sustainability First and specifically how effective our corporate governance plans are at meeting future customer and wider stakeholder needs and to make sure we are operating in the public interest.

We believe that our good corporate governance practices, together with the proposed improvements, are in line with Ofwat's principles of effective board leadership, transparency and governance and directly address the key points identified across the sector to meet customer and stakeholder needs in the longer term. Such items will also enhance further our good corporate culture and values which are articulated further in our recently published Annual Report 2018. These key points include ensuring:

- That within our corporate structure, we have clear responsibility for current and future customer needs
- Both our regulated entity and our parent companies are focused on fair and transparent behaviour when dealing with different interests, including current and future customers, the environment and the different communities we serve
- We regularly engage with our customers and wider stakeholders to ensure our Board risk appetite is appropriately aligned with the public interest
- Our focus on effective gearing levels and transparent taxes demonstrates our commitment to be a respected corporate citizen in the water sector
- Our Board continues to have the appropriate mix of skills and experience to understand current and future customer and wider stakeholder needs and our director induction sufficiently covers these matters
- Our Board continues to set the tone at the top to promote public interest values, and our strong levels of interaction across the company through regular employee 'round tables'

and management and employee committees ensure this message is cascaded to all our people and they have the opportunity to feed back their ideas.

Due consideration of the above matters will be built into an overall sustainability framework that will form part of our Board's strategy work leading up to 2020 and beyond. However, several aspects of ensuring the sustainability and long-term Company resilience are already underway, including the de-gearing process described in the Financing Chapter. Additionally, an enhanced approach to executive succession planning, as described in our Annual Report 2018, has been implemented for the finance and regulation director position, and certainty around the recent tenure of the chairman, senior independent non-executive director and shareholder non-executive director has been considered and addressed.

Conclusion

We recognise the importance of strong Board leadership, transparency and governance and are already operating in-line with the expectations of our regulators in this area. We agree that we can go further to help build on the trust and confidence of our customers and the wider sector. We are already acting to ensure that from 2020 our activity and decision making, particularly in relation to financial matters, is more transparent and accessible. We are also increasing our focus on the long-term sustainability and resilience of our corporate governance to ensure we operate in the public interest.

CHAPTER 7

Resilience

We have strengthened our approach to ensuring we can cope with disruption and meet the increasing expectations of our customers for many years to come

In this chapter you will hear about

- How we have identified and mitigated the full range of risks that could impact the service we provide.
- How a resilient supply of high quality water is our customers' number one priority.
- The investments we are making to build on our strong track record.

Resilience

Providing resilient services has been a key feature of our business planning and delivery throughout our 150-year history. Rarely do our customers experience breaks in their supply – we have the lowest rate of burst mains in the industry and supply interruptions are also very low. We have not had to introduce serious restrictions on water use for decades – standpipes were last used in 1976 – and our water has consistently reached the highest quality standards with the last major water quality incident occurring more than ten years ago. This strong performance is the result of far-sighted planning and prioritisation of risk mitigations, targeted and appropriate investment and an effective and organised business response when issues occur.

In developing our plan we have taken the opportunity to take a more holistic view of the risks that could impact our business, embracing the concept of resilience in the round, with eight key areas of focus that cover the operational, financial and corporate risks we face:

We have assessed what the different risks are, how likely they are to occur, the consequences if they do and the knock-on effect on other parts of our business. This has enabled us to prioritise them appropriately and set targets for the level of risk we are prepared to carry.

We recognise that the type and nature of threats are changing and so must the way we mitigate them. We have considered a range of actions to reduce and manage the risks we have, incorporating the Government's four resilience principles – resistance, reliability, redundancy and response & recovery. This results in a combination of activity which is not only cost effective but will together deliver a multi-faceted response, not reliant on single solutions, to achieve better longer-term outcomes for customers.

Throughout our plan, investment and activity to increase resilience is highlighted. In this chapter we set out how we've enhanced our approach to resilience planning – and our business-wide risk management processes – and identified the actions we will take.

Resilience today

Our strong track record

We start from a good position today – achieved only through continuous focus on ensuring we can meet the expectations of our customers while protecting the environment in adverse as well as normal circumstances. It can be seen in all aspects of our business:

Sources and process:

- We have avoided serious restrictions on customer usage for decades and have not introduced temporary use bans since 2012, despite two winters of below average rainfall
- We can draw on a wide range of raw water sources to meet demand, and are able to switch sources easily in the event of short-term raw water quality or quantity issues
- Our treated water quality consistently reaches the highest standards, achieving an average of 99.99% compliance on samples taken from our treatment works, service reservoirs, distribution network and customers' taps since 2010
- None of our existing abstraction licences are subject to sustainability reductions, signalling strong environmental health and resilience
- Our treatment works and pumping stations have high levels of reliability – our unplanned outage (as a proportion of our dry year critical peak week) is less than 5%, and only 15% of the maintenance we undertake is reactive
- We have delivered flood protection and mitigation measures at our sites since 2014 and continue to assess our ongoing resilience to flooding.

Network assets:

- Our assets are in good condition. We have maintained stable serviceability of our assets for 20 years, have the lowest level of bursts in England and Wales and supply interruptions are low
- We have met our leakage targets for the last 19 years and have one of the lowest levels per property in the industry
- We have installed new strategic mains to ensure that many of our customers can be supplied by more than one of our treatment works
- If issues do arise, we respond quickly and effectively, as seen during the freeze/thaw event in March 2018, when our planning, well-practised procedures and service ethos were displayed to full effect and only four customers lost their water supply for more than three hours
- We take collaborative action. The storms and heavy rain in the winter of 2013/14 tested our response to flooding at one of our key water treatment works, but by working with London Fire Brigade, the London Borough of Croydon and neighbouring water companies, no customers lost supplies.

Business systems:

- We regularly practise our disaster recovery and incident management systems, with fully-functioning recovery centres at a treatment works for our head office-based operational control room and at a third-party location for our corporate systems

- Emergency planning training includes exercises run by expert external advisors to Government agencies and tests multiple, uncorrelated events that put a simulated strain on all aspects of the business.

Financial:

- Our finances have proved resilient to changes in the external environment, despite our current level of gearing. We have maintained a steady Baa1 rating with Moody's for a number of years and are one of the few highly-geared companies who have not been down-graded or placed on negative outlook over the last 12 months under the prospective credit-negative impact of the PR19 price control review and associated benefit sharing proposals
- We benefit from strong governance and close engagement with our independent non-executive directors (INEDs). We have been responsive to new governance requirements, including quickly changing the composition of our Board to make INEDs the largest single group. We comply with the UK Corporate Governance Code and have maintained a stable ranking near the top of the targeted assurance category of Ofwat's Company Monitoring Framework since it was first introduced.

People:

- We have maintained a strong safety record and focus has now turned to the physical and mental health of our workforce too with 'Aqualibrium', our employee wellbeing programme
- We have historically had low staff turnover and our effective succession planning was highlighted in our gold Investors in People assessment.

Supply chain:

- We build long-term relationships with many of our key supply chain partners that span price control periods – and provide line-of-sight for upcoming work, allowing them to better plan for the future
- We have robust selection processes in place to ensure that prospective partners' values and cultures align with ours, including their attitude towards, and preparations for, ensuring a resilient service to their customers
- We co-locate these partners in our offices, so a collaborative approach is taken to many activities which increases their understanding of what we do and encourages fresh thinking.

Customer participation:

- We have a strong record of ensuring that our customers pay their bills, with consistently low levels of bad debt. Supporting those facing financial hardship has helped with this, as has our debt recovery team having the right processes in place, which was endorsed by the Consumer Council for Water when we were the first company to achieve full marks in their industry audit in 2017
- We have run an education programme for nearly 20 years – explaining the importance of water efficiency to children who are now becoming bill-paying customers.

Facilities management:

- We ensure our sites are safe for our staff to work on and secure against unauthorised access by others
- Effective business continuity plans are in place for our buildings, including response times being clearly defined in maintenance contracts.

We report annually on our key business risks and how we are mitigating them, and they are regularly reviewed by our Audit Committee. The latest summary is in our Annual Report 2018.

Keeping passengers flying and the economy flowing

In 2014 we began permanently logging all the major meters supplying Gatwick Airport. Loggers capture water use data every 15 minutes and upload it daily to an online portal. We provided Gatwick with a unique login so that they can view this data along with meter readings to help them keep close track on their usage at all supply points into this complex site.

This was provided along with a leak detection service to help them find leaks on their private network. Our repair gangs continue to work with Gatwick and their contractors to make repairs where needed. We regularly put our staff through 'Gatwick Contractor' training, so they can work at the airport.

Despite no longer providing retail services to Gatwick, as the wholesaler provider to this site of critical national infrastructure, we maintain close contact with them and our network inspectors keep a working knowledge of the mains network connectivity at the airport, so we can assist quickly when needed.

Our network resilience strategy has been developed with maintaining an uninterrupted supply to Gatwick in mind. Our Outwood to Buckland trunk main, completed in 2015, makes it possible to supply the airport from multiple water treatment works.

What matters to our customers

Customers expect a high quality, constant and reliable supply of water now and in the years to come. They expect us to be future focused to address climate change and environmental concerns and want us to reduce the risk of drought by investing in infrastructure, tackling leakage and supporting behaviour change to reduce demand. They want us to be innovative in securing sustainable supplies.

We tested customer views on what resilience means to them and its relative importance compared to other priorities. They are most willing to pay for improvements that protect them from supply failures, reduce interruptions and cut leakage. However, we know doing this requires more than just operational activity. It needs to be supported by resilience across everything we do – from having the right skills mix within our business to the financing arrangements in place to allow us to respond to a range of scenarios.

Future challenges

Strong performance to date does not mean we are complacent. We recognise there are things we still need to do and keep doing to maintain and progress our position which is reflected in our pledges. We also know that the threats to all aspects of resilience will continue to change and require an enhanced ability to resist or respond to new pressures. There are also new aspects of resilience that have not been explicitly recognised as such in the past and although past performance may have been adequate, reviewing them through the lens of resilience in the round is helpful. Examples include:

- Population growth – predicted to be more than 40% within our region over the next 60 years
- Demand management – how this is changing, why and when our customers use the water we supply
- Climate change – increasing the variability and impact this will have on weather patterns and reducing access to raw water by more than 6% over the next 60 years
- Protecting the environment – which is coming under greater stress, and the requirement to not only minimise our impact but make improvements
- Rising customer expectations – ensuring we can predict, and at least meet these at all times, from methods of communication to speed of delivery
- Employment patterns – which are increasingly different to 30 years ago, from access to the right type and volume of skills to having a balanced age profile within a flexible, tech-savvy workforce
- Financial resilience and levels of borrowing – maintaining a solid investment grade with independent credit rating agencies and ensuring we have an adequate equity buffer to accommodate cost, revenue or other financial shocks
- Corporate governance and transparency – the need to have a broader and deeper relationship that creates greater trust from the communities we serve in order to achieve ongoing engagement and participation.

Assessing and prioritising risks

As part of developing this plan we carried out a full review of the risks facing all parts of our business, their consequences and how resilient we currently are to them.

We categorised the risks into eight key areas – looking at each in terms of its impact on customers and the environment – and appointed a company champion for each. The focus on the environment has cut across all areas because of both our reliance and impact on it. Our activity to deliver increased environmental resilience – both through meeting our obligations and going further in key areas – can be seen in the Environment Chapter.

Our small size and the expertise and knowledge of our people has allowed us to carry this out in an efficient and coherent way, and ensure it has influence across the business. This process has been sponsored by one of our independent non-executive directors, himself the chief executive of a global strategic engineering and environmental consultancy, who has supported the process and challenged our thinking throughout to ensure the theme of resilience flows through our plan.

This builds on our existing approach to risk management and links back to our corporate and departmental risk registers. We developed it from a 3x3 to a 5x5 matrix to provide a more granular assessment and align it with other business and industry risk scoring metrics such as Drinking Water Safety Plans. Each risk was assessed using the same approach to ensure consistency, which is essential for appropriate prioritisation.

Assessment of risks

Each risk was given a:

- Gross risk score – the risk to the business without any mitigations (including those we already implement)
- Residual risk score – the risk to the business despite current mitigations in place
- Aspirational risk score – the risk to the business we aim for after applying additional cost-effective and realistic mitigations.

To determine the three risk scores, for each risk we applied the following equation:

Risk = impact x likelihood

Impact was assessed across three parameters:

- The impact financially on the company (as a % of turnover)
- The impact on our ability to deliver our pledges and performance commitments
- The impact on our ability to satisfy the needs of our stakeholders, particularly our customers

Likelihood was assessed on a probability basis by subject matter experts involved throughout the process.

All scores were reviewed and challenged by our compliance and assurance manager who co-ordinates the production of the corporate risk register for our Audit Committee.

Resilience champions presented their list of identified risks, mitigations (current and planned) and scoring assessments to peers for challenge and assessment of consistency. Our compliance and assurance manager supported our resilience champions, and workshops to review cross-functional scores were chaired by our wholesale services director and attended by our independent non-executive director sponsor.

The scoring matrices are shown below:

Figure 1: High level process map

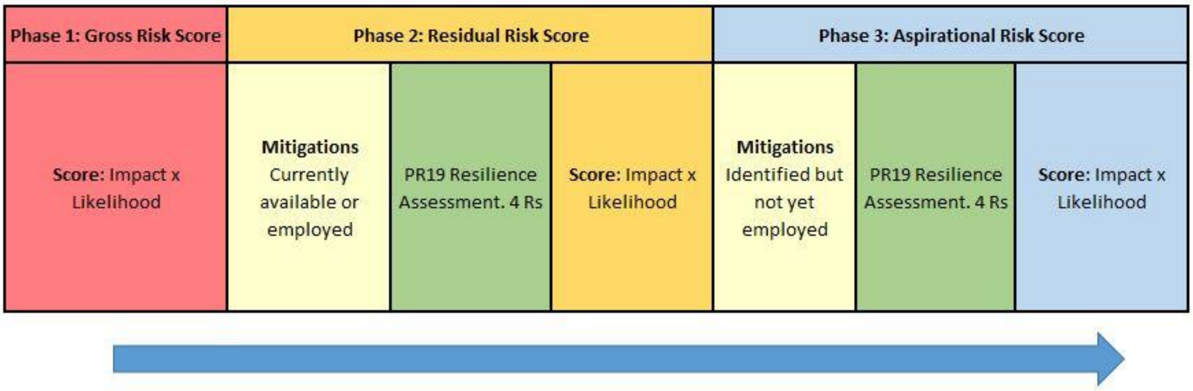


Figure 2: Risk scoring matrix

Impact	Very high	5	10	15	20	25
	High	4	8	12	16	20
	Medium	3	6	9	12	15
	Low	2	4	6	8	10
	Very Low	1	2	3	4	5
		Highly Unlikely	Unlikely	Possible	Likely	Highly Likely
		Likelihood				

For each risk a risk profile map was developed, with one example below. All risk profile maps are available in Appendix A7.1 - Resilience risk profile maps. This enabled us to clearly visualise the impact of risks and prioritise them appropriately.

Figure 3: Example risk profile map

Identification of mitigating actions

For each risk we have identified a range of mitigating actions which can be grouped according to the Cabinet Office's classification of resilience activities – the '4Rs'. This focused on the future activity required to drive the level of risk down from the current residual risk level to the aspirational level.

The following table sets out how we've interpreted the 4Rs approach in relation to the mitigating actions:

Resistance	
Government definition of good resilience practice	Preventing damage or disruption by providing the strength of protection to resist the hazard or its primary impact
Our context	A mitigation must be able to prevent an event or the main impact of an event
Reliability	
Government definition of good resilience practice	Ensuring that the infrastructure components are inherently designed to operate under a range of conditions and hence mitigate damage or loss from an event
Our context	A mitigation must be able to improve the reliability of services or systems to a broad range of scenarios, so that the likelihood of an event occurring is reduced
Redundancy	
Government definition of good resilience practice	This is concerned with the design and capacity of the network or system. The availability of back-up installations or spare capacity will enable operations to be switched or diverted to alternative parts of the network in the event of disruptions to ensure continuity of services
Our context	A mitigation must offer additional redundancy in the form of capacity or headroom to help withstand an event
Response & Recovery	
Government definition of good resilience practice	Enabling a fast and effective response to, and recovery from, disruptive events. The effectiveness of this element is determined by the thoroughness of efforts to plan, prepare and exercise in advance of events
Our context:	A mitigation must demonstrate the ability to reduce both time and impact of an event

We have challenged the historic industry norm of heavy reliance on redundancy as the main form of resilience. We recognise that the type and nature of threats are changing and so our response must also change. Our resilience plan demonstrates that we have considered mitigations (both existing and aspirational) that achieve resilience using one or more of the 4Rs appropriate to each situation.

Promoting innovation

Our enhanced approach to resilience has meant we have looked at mitigations differently to the way we have done in the past. We have deliberately been aspirational in our identification of future mitigations, encouraging free thought that is not constrained by what is currently possible. Identifying and scoring over 100 risks demonstrated common benefits to mitigations, both in the outputs they deliver and their efficient delivery. We have embraced the need for smarter solutions to resilience issues, with our core innovation projects solving challenges that we face. This is funded through re-investing savings made in the year and ensures that our approach is sustainable and resilient for the future. Read more in our Innovation Chapter.

Choosing the best value mitigations

The process generated over 100 risks across the business. As it was deliberately unconstrained, a number of these (residual) risks were already known and already had some mitigation in place. Others were newly identified (gross) risks or known risks where our enhanced assessment demonstrated that insufficient mitigation was currently in place.

We assessed all risks to establish what additional mitigation was required to move all – both gross (for newly identified risks) and residual (for existing risks) – to the aspirational level identified. The expert knowledge we have within our business, our awareness of and openness to trying new ways of doing things, and our small size very much enabled us to carry out this process efficiently and consider the benefits across multiple areas.

At this stage of the process we established that, for a number of the risks, we were able to put in place additional mitigation as part of ongoing business activity – through small changes to business processes or systems. Much of this we have already done – we considered it good practice to do this as part of business as usual.

Building the 'One Team' approach

During the early stages of our root and branch risk review, newer members of the team who had recent experience of working in supply businesses elsewhere in the sector flagged the potential problems and constraints that a lack of visibility of future workload creates for key suppliers.

This exercise coincided with a partial refurbishment of our head office and the enhancement to our engineering project planning and delivery processes. Collectively, the concept of creating a single, co-located team, better able to plan and deliver projects together, and importantly plan for the future, was progressed.

The 'One Team' ethos has continued to grow and evolve over the last year. Currently, five supply partners are now co-located at our head office and the level and frequency of communication, information exchange and joint problem-solving has increased substantially. Many have played a key role in helping to build this plan and our longer-term strategy.

We, our partners, and vitally our customers, have already all started to benefit from this initiative, and the enhanced resilience it brings.

Other risks, however, were identified as needing more significant mitigation to achieve the aspirational level. We assessed whether the mitigations addressed both short-term and long-term factors and where a short-term fix was needed ahead of a longer, permanent solution. This helped to ensure we were progressing options that delivered sustained benefits for the future.

We also considered which of the 4Rs the mitigation would deliver – to support our objective to rebalance our approach with greater emphasis on resistance and reliability.

The costlier mitigations were generally continuations of existing programmes of work, such as our network resilience programme that will enable us to supply every customer from more than one treatment works. However, we did engage with customers to understand their views. In general customers showed strong support of the mitigations proposed, and in some cases (leakage and usage) wanted us to do more. As a result, we have included specific performance commitments to demonstrate our commitment to delivery.

The mitigation measures that are included in our plan to achieve the aspirational resilience scores and deliver our performance targets include:

- New or upgraded distribution mains and cross connections to improve network connectivity
- Enhancements to four strategic pumping stations to remove the risk to customers from outages at critical service reservoirs
- Smart networks – investing in the infrastructure required to support enhanced monitoring and data collection in the future
- An accelerated metering programme to achieve 90% meter penetration by 2025, with 10% being smart meters, to reduce usage by 7.3% by 2025
- Reducing leakage by 15% by 2025 and at least 50% by 2045.

How we'll deliver increased resilience

We will take a number of actions between 2020 and 2025 and beyond, taking us from our current level of resilience to our aspirational level, using the most effective and best value mix of mitigations. Some are a continuation of existing activity, some require changes to the way we operate, and some need additional investment. They feature in the relevant sections of the plan and a summary is provided below.

Sources and process

- Increasing capacity at Bough Beech Treatment Works so more water can be treated and transferred across our area **(Redundancy)**
- Reducing customer usage through water efficiency projects so more water remains in rivers and underground sources to improve environmental resilience and support the needs of a growing population **(Resistance)**
- Delivering the investigations, studies and projects identified in the Water Industry National Environment Programme (WINEP) to identify future activity required to increase the resilience of the environment **(Resistance)**
- Limiting abstraction from two chalk boreholes when groundwater is more than 43 metres below ground level to reduce the impact of our abstraction in these sensitive areas **(Resistance)**
- Exploring opportunities to generate more renewables and make our standby generation more environmentally friendly **(Resistance and Response & Recovery)**

Network assets

- Completing our long-term project to enhance our network so we can supply every customer from more than one treatment works and move water across our area **(Redundancy and Reliability)**
- Further reducing leakage by increasing our find and fix activity, replacing mains that are more likely to leak and using pressure management so less water is lost from our network **(Resistance)**

- Installing water meters to help customers use less water and assist in locating leaks on their supply pipes **(Resistance)**
- Investing in smart networks – to support enhanced monitoring and data collection **(Resistance)**
- Innovating in our approach to maintenance and replacement of assets, taking a targeted and condition-based approach **(Reliability)**

Business systems

- Providing multiple internet connections via different providers with different technology to reduce the risk of a single point of failure **(Redundancy)**
- Enhancing IT security capability to reduce potential exposure to cyber-attacks **(Resistance)**
- Migrating to more resilient suppliers for key services **(Resistance)**

Supply chain

- Pursuing more opportunities to collaborate with other water companies to increase purchasing power and innovation, building on our already well-established collaborative relationship with Portsmouth Water **(Resistance)**
- Enhancing supplier compliance checks with more rigorous qualification and ongoing checks to ensure potential suppliers align well with our values and strategy and continue to once selected **(Resistance)**
- Establishing greater adoption of performance measures in contract and framework arrangements to deliver consistent improvements in performance over time **(Reliability)**
- Partnership working with a range of specialist suppliers and expert third parties to mitigate the limitations of our small workforce by ensuring we have access to the skills, expertise and knowledge we need **(Resistance)**

People

- Using tools like the Predictive Index Behavioural Assessment in all our recruitment to bring the best people into our business **(Resistance)**
- Introducing additional and regular recruitment streams to ensure a flow of talent remains available at all times **(Resistance)**
- Introducing performance-related pay to better reward and incentivise strong performance and ensure robust processes exist for succession planning to ensure we recognise and grow talent **(Resistance)**

Facilities management

- Implementing a power management strategy for our Redhill head office **(Resistance)**
- Replacing CCTV at sites and offices to reduce the risk of criminal damage that impacts our service **(Resistance)**

Financial

- Reducing our level of gearing to below 60% so there is more equity within our business and increasing our borrowing capability to help us manage financial shocks **(Resistance)**

- Having in place a signed undertaking from our shareholders to provide additional finance should multiple risks occur at the same time **(Resistance)**

Customer participation

- Providing customers with more access to information on our work and advice about their water use and their obligations **(Resistance)**
- Installing smart meters in 10% of homes to provide customers with more information about how much water they are using to help them take action to make savings **(Resistance)**
- Encouraging customers to make their homes more resilient by offering support to fix leaks, subsidising supply pipe replacement and promotion of water efficiency visits **(Resistance)**
- Increasing uptake of our financial assistance schemes so more customers can receive discounted bills and reduce debt **(Resistance)**
- Increasing awareness of our Helping Hand Scheme and Priority Services Register so customers can receive the help they need to access our services, including during emergencies **(Resistance and Response & Recovery)**

Embedding a holistic approach to resilience

The requirement outlined by Ofwat in their PR19 Methodology to assess our business from the perspective of resilience in the round has, undoubtedly, encouraged us to look differently at how we identify and manage risks. Working through the process summarised in this chapter has helped us move to a more comprehensive, integrated level of risk management.

Our risk management tools and approaches are in the advanced stages of being aligned into this single, integrated process. Where possible, key elements of what are currently separate tools (such as our Drinking Water Safety Plans or our corporate risk register) will be combined with the outputs of this exercise to form the basis of what we do in the future.

We plan to adopt this process fully as we progress towards 2020, using it as the basis for our ongoing and longer-term resilience planning, as well as our shorter-term risk mitigation. This will form a core element of our governance approach.

Conclusion

Our approach to resilience in the round builds on and strengthens the method we have adopted in the past to risk management. It reflects the priority our customers place on resilient water supplies and considers the wide range of factors that will contribute to this now and in the future. We've identified an effective suite of mitigation measures for our prioritised risks that will increase our resilience to both short-term shocks and long-term trends. We will continually assess and monitor levels of risk, be alive to and develop innovative ways to tackle them and learn from events experienced by ourselves and others so service to customers remains high and the environment is protected, regardless of the challenges we face.

CHAPTER 8

Innovation

The key to delivering more of what matters to our customers is to be more innovative

In this chapter you will hear about

- Our strong track record with a long industry of innovation.
- How innovation is supporting the delivery of our five pledges.
- How we ensure that our employees are encouraged to think differently, come up with great ideas and are supported to put them into practice.

Our innovation strategy

Innovation is about trying and implementing new things or methods of doing something, with the aim of doing it better than before. For us to deliver more of what matters most to our customers, improve the environment we depend upon, address future challenges, and become more effective and efficient, we need to innovate.

We have a long track record of innovation in our industry and a strong company culture which values and promotes innovation. Our size has allowed us to take a leading role in developing new solutions that benefit both our customers and the environment. This is why we have consistently delivered upper quartile or industry-leading performance in a number of areas.

The work carried out over the last 20-plus years to promote innovation has provided strong foundations on which this plan builds as it took a long-term perspective. Focusing on the future, making informed decisions on which opportunities to pursue while having the flexibility to adapt as advancements are made is critical and very much enabled by a small size and agile approach. We will continue to embrace innovation to help achieve our commitments and pledges as we deliver our plan.

Our innovation strategy is based on the logic of constantly challenging ourselves to explore and implement new ways of working to deliver:

- Improved efficiency, effectiveness or resilience of our services
- Sustainable benefits over the longer term.

It is underpinned through four interconnected elements:

1. Promoting a company culture that fosters and rewards innovation
2. A strategy that looks at innovation in its widest sense – small or large, incremental or radical – which prioritises activity and resource based on need, risk and future impact
3. Collaboration with a range of partners who can best support our innovation needs through true partnership working
4. A sufficient and sustainable financing strategy.

Culture	Strategy	Collaboration	Financing
supportive and empowering	prioritised, focused and one-step ahead	partnerships and openness	sufficient and sustainable

The adoption of this strategy will allow us to focus our time, effort and resources in areas which will deliver genuine sustained improvement and value for customers and put innovation at the centre of delivering our plan.

Our innovation journey – the building blocks of our plan

Innovation cannot be turned on and off, it requires continual focus, effort and capability and has been part of how we do business for many years. It can take many different forms, from the incremental, where we are introducing something to our business for the first time, to the radical, where we deliver something that hasn't been achieved elsewhere. The benefit this change creates could be small or large. A critical element is thinking about the future and focusing on areas that will support our long-term objective to provide a resilient service to customers.

Our approach to innovation crosses all areas of our business – our physical assets, how we finance our business, working with our supply chain and how we engage with our customers and employees. The following examples highlight the important role innovation has played over recent years and how it's created the building blocks of our plan.

- In 1999, we were one of the first utilities, and the first water company in the country, to launch electronic billing for our customers. Rebranding our online billing platform in 2017 has led to one of the highest take ups of online billing in the country with more than 45,000 of our 266,000 household customers now benefiting from the service
- In 2000, we were the first water only company to issue an index-linked bond of its nature, which then became a common way for smaller companies to gain access to lower cost finance
- In 2006, we pioneered the use of ultra-violet water treatment at our Elmer Treatment Works to ensure that cryptosporidium did not compromise the quality of the water. This is something that is now used extensively across the industry
- In 2012, we worked closely with Google to develop and introduce an innovative tablet-based work package based around Google Maps, and became the first utility in the world to do so, increasing the speed and accuracy of our field work on the ground.

Sustained innovation to deliver leakage reduction

In the mid-1980s, we were one of the first water companies in the UK to divide up our network into district metered areas (DMAs) to help us better understand where leakage was occurring. The infrastructure we installed means that today we have high information coverage across our network and lots of historic data about how it performs – which helps us identify and address issues more quickly and effectively.

In the mid-1990s we installed pressure management control throughout our network and as a result saw a dramatic reduction in the amount of leakage occurring. It has also helped us achieve the lowest level of burst water mains in the industry and keep interruptions to our customers' supplies at a consistently low level – something that we know is important to them and which we'll continue to reduce.

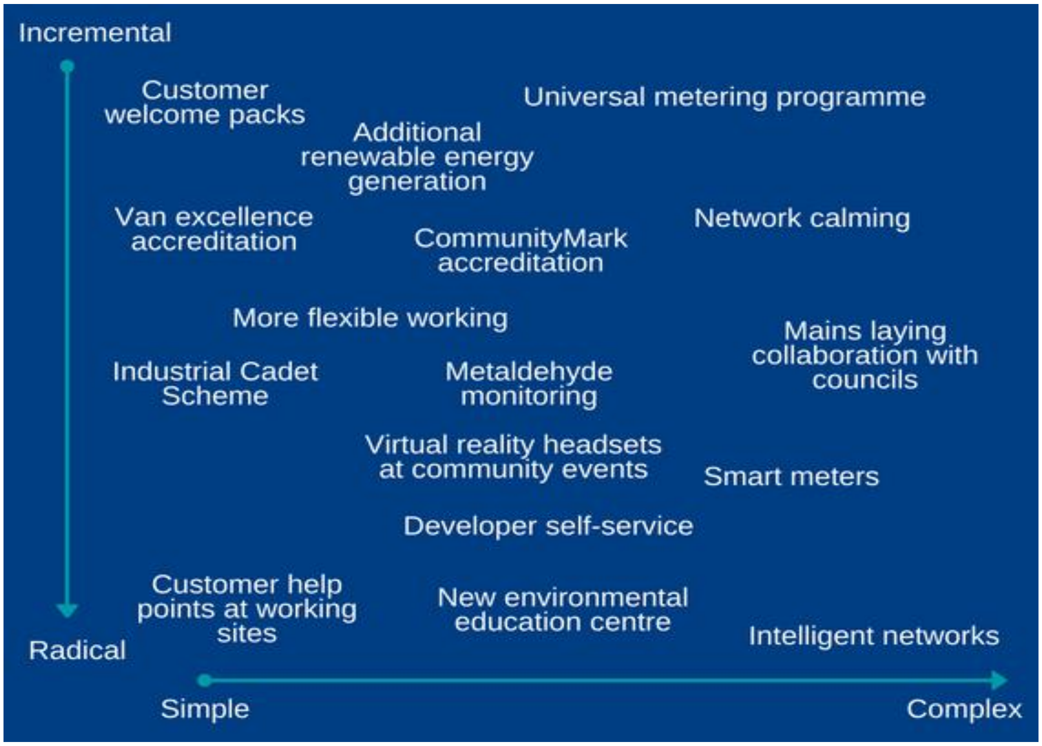
As a direct result of this work, we were able to implement an innovative leakage contract in the late 1990s which ensured that the contractor was only paid for an actual drop in the DMA nightline, providing a direct incentive to detect and locate all leaks in an area. This approach has been fundamental in consistently meeting our leakage targets and sees us operating with one of the lowest leakage levels in the industry.

We will continue our innovation in leakage reduction, with strong progress being made on implementing a new technique to condition assess the integrity of water mains, allowing us to further improve the targeting of mains replacement, and the introduction of new technology and techniques to identify and locate leaks more quickly.

Supporting our PR19 plan – how innovation will deliver more for our customers

Innovation is integral to our plan and will be critical to achieving each of our pledges. We know that some of the things we will try will not work. Our challenge is to ensure we have a broad spectrum of opportunities that we can pursue and which can ultimately be applied across our business. We will be robust, ensuring it aligns with our size and focused on the things that will deliver the greatest benefits to our customers.

The following diagram shows some of the innovations we are currently progressing and whether they are incremental or radical, simple or complex in scale and benefit. Further details of some of these and other innovations we intend to implement to support the delivery of our pledges are set out in more detail below and elsewhere in our plan.



High quality water all day, every day

We'll maintain our water quality performance through:

- **Replacing shared lead supply pipes** to 100 properties per year to address water quality issues, reduce leakage and enable us to meter properties which previously we were not able to, helping to increase our meter penetration.

We'll reduce the number of burst mains and interruptions to supply by:

- Installing additional technology in the network and enhancing our analytical capability to create **intelligent networks** – better able to predict issues
- Developing a technique for **condition assessment of water mains** without the need to dig them up, adopted from the IT industry and North American water sectors
- Exploring the adoption of further new technologies that can help us reduce the turnaround time of repair activities – like **under-pressure valve installations** – to supplement other techniques like line-freezing and overland supplies.

Fair prices and help when you need it

We will provide support to vulnerable customers and those facing financial difficulty by:

- **Working with foodbanks across our area** to identify and provide additional support to customers experiencing challenging circumstances and ensure they receive the financial and non-financial support they need.

We are reducing bad debt by:

- Trialling **advanced trickle valves** that we are developing in partnership in new homes to encourage new occupiers to contact us as soon as they move so we can provide accurate billing from day one. Those that don't will have water but will need to manually re-set it frequently.

A service that is fit now and for the future

We'll reduce leakage by:

- Deploying newly developed technology into our district metered areas (DMAs) – such as **fixed noise loggers** – to detect leaks more quickly
- Utilising the technique of **condition assessment of water mains** to further improve the targeting of our oldest and poorest integrity mains for replacement
- Using the Internet of Things (IoT) networks that we are developing to facilitate the introduction of **smart meters** to help us develop a communication network covering our area, enabling us to gather near real-time data to assist with leakage reduction
- Identifying and reducing pressure transience to facilitate **network calming** by investing in new models and solutions.

We'll improve the operation of our treatment works by:

- Adopting new technology to increase the life of our borehole pumps by coating them with **PTFE** – a type of Teflon – to stop them becoming unreliable and inefficient
- Introducing more **condition-based maintenance** of high-criticality assets at our works, adopted from techniques used in transportation and oil & gas sectors, to optimise work undertaken and better predict asset failure before it happens.

Excellent service whenever and however you need it

We'll keep our customers informed by:

- Continuing to develop our **digital strategy** that will provide one platform to hold our new website and a range of customer applications to enable them to self-serve, should they wish to
- Utilising our **intelligent networks** to identify issues proactively and inform customers of known problems before they affect them, particularly those that are in vulnerable circumstances
- Providing **customer help points** at our large works, which will remotely alert the site manager that a customer wishes to talk to them about the work that is being carried out.

We'll support a thriving environment we can all rely upon

We'll cut our energy use and reduce carbon emissions by:

- Continuing to reduce our energy consumption through the adoption of new **energy efficient technologies** – such as super-efficient transformers or mini-turbines in our network
- Bringing our electricity supply and flexibility capability together so that we can maximise the opportunity to **provide balancing services** to the National Grid. This will help us

avoid peak times on the grid when carbon emissions from power generation are at their highest
- Progressing opportunities for **additional renewable generation** and battery storage on our land and buildings, bringing down our overall energy costs and emissions.

We'll cut household water usage by:

- Trialling the delivery of our **universal metering programme** by encouraging as many customers as possible to switch, based on provision of consumption data and water efficiency advice and apps – rather than enforcing
- **Installing smart meters** in 10% of households. We've been trialling smart water meters based on the developing Internet of Things (IoT) solutions. With the help of a major telecoms supplier, we've built a number of bespoke test units to help us understand the range, battery life and communication frequency. This will also help us increase customer participation in their water supply.

We'll improve river water quality by:

- Exploring and testing **real-time monitoring of metaldehyde** levels so we know when levels have the potential to impact on water quality and to help us engage with farmers and landowners to reduce the chance of it entering our water sources.

We'll improve our education programme by:

- Building a second, **interactive environmental education centre** at Elmer Treatment Works which, combined with the one at Bough Beech, will provide clear linkage between water use, energy and the environment. It will be delivered through an innovative partnership with an energy provider who shares our environmental vision.

Resilience Innovation

Innovate to educate

We opened the doors to our purpose-built education centre at Bough Beech Reservoir and Treatment Works in 1999 and since then we are proud that our education programme has ensured that nearly 50,000 adults and children have learned more about the link between their water supplies and the wider environment.

We plan to build a new education centre at Elmer Treatment Works to build on the last 20 years. We know that water is not top of mind for most people but what is important to many is looking after the environment which is why our new centre will provide more reasons - like energy and wildlife - for people to want to visit. Developed in partnership with other companies in the local area and designed by visitor attraction experts, it will focus on the lesser-known groundwater treatment process, including boreholes and a visit to nearby Fetcham Springs. There will be a laboratory for scientific experiments, 360-degree cameras to see inside water tanks and crucially we will be able to measure the impact of our activities through voting keypads, our 'Flow Patrol' alumni club and smart meters.

How we deliver innovation

We have developed all four elements of our innovation strategy – culture, strategy, collaboration and financing - over time. There is undoubtedly work still to be done to develop our capability more in these areas, but we have a solid platform already in place.

In 2015, we appointed a dedicated innovation manager and soon afterwards undertook an innovation maturity assessment. This enabled us to understand the depth of innovation maturity across our company – in our people, our culture and our processes. It also helped us to gauge how innovation was viewed and accepted by these different groups within the company. The assessment has helped finesse our innovation strategy and better target our activity.

In early 2017, our non-executive chairman took the lead in championing innovation, not just as a theme in our business plan but as a keen advocate of the importance it plays in how we operate. Our goal is to ensure that innovation is valued, nurtured and developed at all levels and we will carry out subsequent assessments to measure the level of improvement and identify new areas of focus.

Developing a culture of innovation

Since 2009, we have taken a number of steps to develop and promote a culture that supports innovation - one of our company values - and include examples of the activities carried out so far below.

Empowering and incentivising employees:

For the last ten years, we have run a company-wide scheme known as 'ERIC' (Employee Realistic Ideas Capture) to recognise and reward incremental innovation suggestions and have received over 440 ideas – the equivalent of 1.5 per employee.

In 2016, in response to the innovation maturity assessment, we introduced innovation project teams (IPTs). An IPT is used when an incremental innovation idea requires a more complex cost-benefit analysis, and are typically formed of three employees, including the idea originator and colleagues with the appropriate skills to assess its potential. Once the idea has been developed it is presented to senior managers to assess whether to implement it.

Employees who have taken part in an IPT also receive a financial reward, which is made regardless of whether it was successful in implementing a solution, to recognise their effort and commitment.

Innovation is part of the day job:

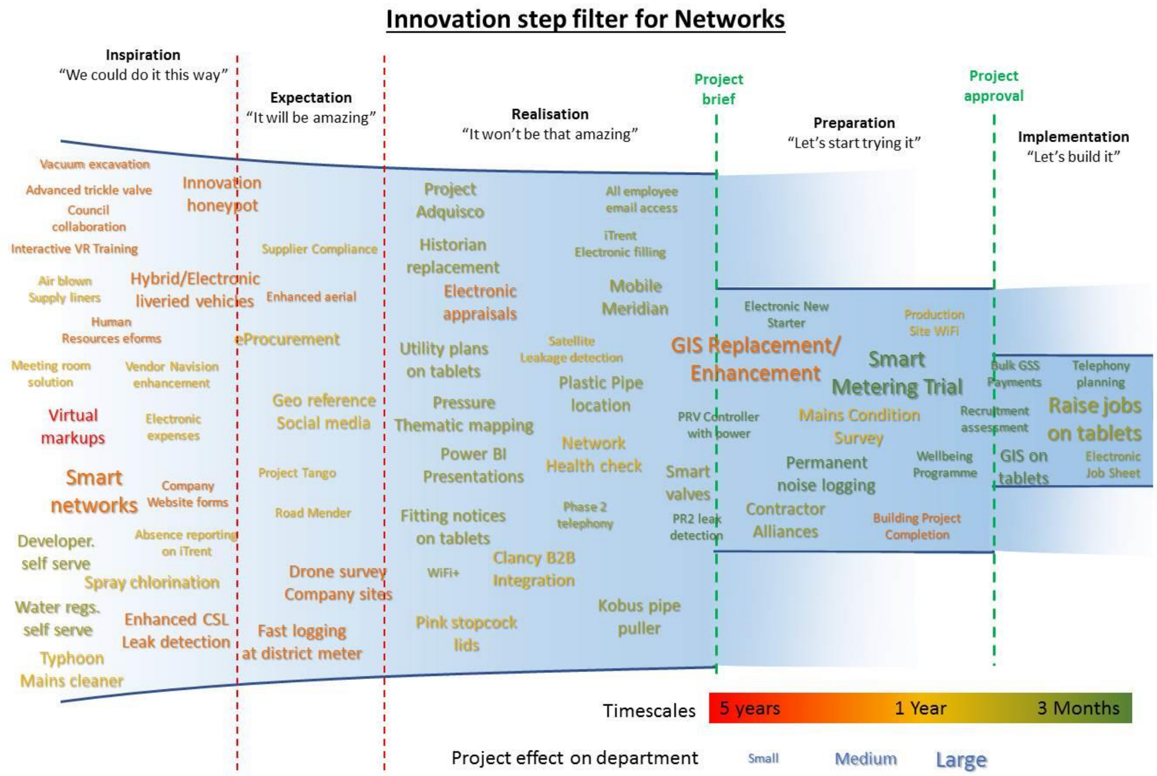
The innovation maturity assessment highlighted the importance of all employees understanding that they have a role to play and are responsible for driving innovation. We have included specific questions on innovation in our annual appraisal and employee engagement survey which help employees take personal responsibility.

Company-wide mapping and tracking:

The assessment also highlighted the need to keep employees aware of the innovations that are being investigated, progressed and implemented. Each department has its own Innovation Step

Filter (ISF) which tracks the ideas currently under development and sets out key attributes of each project to help increase awareness and understanding. It also includes projects being developed in other areas of the company to ensure alignment and collaboration between teams.

The ISFs are updated on a regular basis, and an example of a current ISF is shown below.



Our strategy

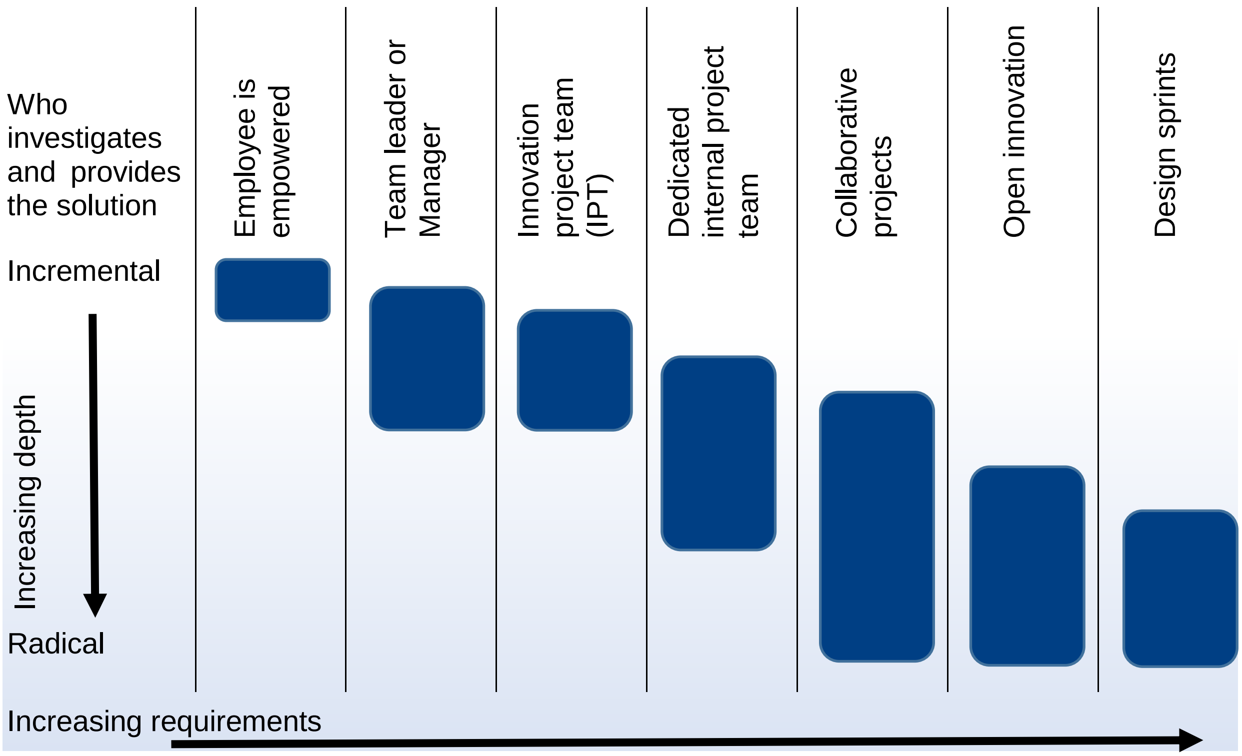
We recognise that there is wide variation in the scale, cost and impact of innovation projects. Some will be driven from the bottom up – by employees trying to solve problems and using ERICs to promote their ideas. Some will come from the top down – identified by senior managers to meet a new regulatory target or expectation. Others will be driven by the supply chain developing new technologies to meet existing and new challenges.

Regardless of the origin of the innovation our strategy must remain sufficiently flexible while at the same time robust and systematic to ensure time, resources and funds are allocated appropriately and progress is monitored. Equally, the strategy must be open to innovation across several areas – skills, systems, processes and technologies, and vitally, it is not purely focused on efficiency.

Developing ideas:

We use a variety of techniques to progress and develop innovative ideas. This recognises differences in the complexity and potential impact of an innovation and ensures the appropriate time, resource and funding is provided to progress it.

The diagram below summarises our approach, demonstrating that for simple, straightforward projects, empowered employees can progress and deliver changes themselves – gaining credit and recognition for the project as a result.



For larger, more complex ideas, our strategy ensures that the right level of support is given to developing and delivering these projects and assesses progress of our more radical projects by using ‘stage gates’ where between each stage of activity we carry out a review to determine whether the project is on track or whether it needs to stop or be changed.

Managing risk:

As a small company, it’s vital that we have a high success rate when innovating. With limited resources, when embarking upon an innovation project, we need a high degree of confidence that it will be successful when trialled. Failure could be expensive and may impact our ability to try new things in the future.

For projects that are more dynamic, we combine the approach summarised above with agile development methods that are less prescribed and allow projects to evolve in a non-linear way.

Doing this means we better manage both the innovation process and the risk for our most radical developments. If a project is going to fail, we need it to fail fast to limit our exposure.

Collaboration

Innovation requires collaboration, another of our company values, and we work with a range of partners to develop ideas and benefit from the expertise of others.

For this to be successful we must be open about the problems we are trying to solve, to attract new partners and drive our current supply chain to share innovative solutions. We have a dedicated section of our website where we promote the projects we are currently working on and the future issues we are looking to address, and it has proved a useful tool to help us find new partners.

We are actively promoting the water resources market through the publication of a transparent bid assessment framework, which is seeking third party bids for delivery of all elements of our Water Resources Management Plan (WRMP). This includes the provision of demand management activity including leak detection, water efficiency, metering and pressure management. This has the potential to drive more innovative methods to meet our ambitious targets as well as identifying new supply and demand-side options for the future. It can be found in Appendix A4.4 - Bid Assessment Framework.

This, in combination with us taking an active approach to engaging with and following the work of other organisations, means that we have forged a number of strong partnerships over recent years with other water companies, our supply chain, companies that are owned by our major shareholders (Sumitomo Corporation and Osaka Gas), academia and our customers.

Customer Service Resilience Innovation

Collaborate to innovate

Working with other companies:

We've partnered with a fellow company owned by our shareholder to develop highly accurate pressure and vibration sensors to ascertain not only the location of leaks, but also any constrictions on the network, together with the relative condition of the underground infrastructure. This will ensure that not only will we be able to locate leaks more easily, but also reduce customer complaints of low pressure and ensure that our mains replacement programme will be more cost effective.

Portsmouth Water partnership:

'Collaborate to Innovate' is a sourcing initiative with Portsmouth Water, a company of similar size to us. Together we have shared more ideas, increased innovation and found more cost-effective solutions for both companies, one being our arrangement with Electrosteel for iron pipes and fittings. We were already working with them but since joining up, both water companies have benefitted from lower prices, new products and the supplier has introduced a continuous improvement process which will bring more innovations for all our customers.

Funding innovation

We would like to pursue every viable innovation that we are alerted to. However, in some cases, either the scale of investment or the level of risk means that, as a small company, we are unable to.

In such cases, we are developing our strategy to ensure that ideas are not lost, but instead are actively pursued. We will look for opportunities to co-fund projects or promote to other, larger companies through our collaboration networks. This way, great ideas are less likely to be lost to the water sector and we can learn from others and implement those that have been proven.

Customers have told us they expect us to be more efficient and try new ways of doing things, but they expect this to be part of how we operate and don't expect to pay more for it. We agree, which is why we are developing ways of resourcing sustainable innovation. Our approach is based on the principle of investing savings made in the first year back into innovations that will deliver benefits in subsequent years. The scale of the investment we make depends on the scale of the savings we generate – the more savings, the more future investment.

This works well for our current efficiency programme, but innovation isn't just about efficiency. Where we are focusing on delivering improved effectiveness, a successful project invariably results in less work (or re-work) for us. This frees up capacity that is used to identify or deliver future innovation schemes which creates a virtuous circle where more innovation is pursued.

This also helps foster our culture of innovation as employees can see the direct link between the savings they are generating and the investment being made for the future. It also means that customers are not being asked to pay.

Conclusion

Over recent years we have renewed our focus on innovation and are strengthening our strategic approach in progressing opportunities in the areas that matter most to our customers and the environment. It is an area that we are committed to and will continue to learn from others and develop our approach over the coming years.

Between 2020 and 2025 we will do more, including developing intelligent networks, intuitive interfaces for customers and an interactive education centre – as this will help to transform the service we provide and our long-term resilience.

CHAPTER 9

Environment

One of our five pledges is to support a thriving environment that we can all rely upon

In this chapter you will hear about

- How we will protect the environment and reduce the impact that we and our customers have on it.
- How we plan to go further than we are required to do, by actively improving rivers and making our own sites more attractive to plants and animals.
- Our exciting plans to expand our education programme with an innovative new visitor centre.

Our environment

A healthy environment is critical to our business. We rely on the environment for our product – 85% of the water we supply comes from sources beneath the North Downs and the balance from the River Eden – so we need it to be healthy and abundant. We also impact the environment every day through the energy we use, the emissions we create and the water that is returned through the treatment process.

Our strategy takes a twin-track approach of protecting and enhancing the environment both now and in the future through:

- Minimising the impact that we and our customers have on it
- Actively improving it in areas of benefit to our customers.

Our strategy comprises four pillars of activity:

1. Leaving more water in the environment and mitigating the impact of our abstractions – by reducing both demand from customers and leakage from the network
2. Reducing energy use, embracing renewables, limiting and where possible stopping greenhouse gas emissions created by our operations
3. Enhancing biodiversity and the catchments we operate in – though the delivery of regulatory requirements and additional improvement through working in partnership with environmental stakeholders
4. Engaging with our customers – both current and future – about the linkage between water use and the environment.

Our strategy will deliver and go beyond our legal duties to protect and, where possible, enhance the environment. It will progress the Government's long-term ambitions as set out in its 25-Year Environment Plan and will also ensure we meet the expectations of the Environment Agency and Natural England, as set out in the Water Industry Strategic Environmental Requirements (WISER) – see Appendix A9.1 – WISER report.

Our track record

Our approach to and focus on the environment has always been central to the considerations of our business. Whilst we recognise, accept and fully embrace the need to do more between 2020 and 2025, and sustain this trend thereafter, we believe we already have a strong environmental focus and over recent years have made significant progress by:

- Reducing the amount of water that we take from the environment to treat and distribute by 25% over the last 50 years - despite our customer base growing by more than 25% since the early 1990s - through sustained leakage reduction, metering and water efficiency activity
- Gaining the environmental accreditation ISO14001 in 2015, renewed in 2018
- Delivering a strong compliance performance with regulatory requirements and minimising pollution incidents from our operations
- A sustained reduction in energy consumption, the introduction of renewable generation at a number of our sites, and from June 2018, purchasing only electricity that has come from renewable sources
- Developing relationships with local river and wildlife trusts to work in partnership to deliver projects that enhance the environment we and our local communities rely upon
- Delivering an award-winning environmental engagement and education programme which has seen nearly 50,000 people take part over the last 20 years

- Signing up to the Cambridge Institute for Sustainability Leadership's 'Catchment Management Declaration' which brings together many different organisations to tackle the collective challenge of water stresses through catchment management.

Delivering the core themes

The core themes of customer service, resilience, affordability and innovation run through our environmental strategy, as they do the rest of our plan.

Providing excellent service to our customers includes delivering strong environmental performance and ensures that the rivers and streams in our local area are healthy and can support wildlife – helping to enrich and enhance the wellbeing of our local communities. It's also about engaging with customers in a way which they value, and which helps and encourages them to play an active role in protecting natural resources.

Our activities to manage and mitigate our impact on the environment must be efficient and cost effective – so they provide good value to us and our customers. We do this by maintaining strong environmental stewardship across every aspect of our business that has the potential to impact the environment and identifying opportunities to make cost efficiencies.

The environment is part of our network of infrastructure so it's essential we work to improve its resilience, alongside that of our wider network and business. With the prevalence of more extreme weather events, which have the potential to impact our customers, it's essential our environment is better able to cope with and adapt to both short-term events and longer-term trends.

As the pressure on the environment changes, so must our approach to dealing with the challenges this presents. For us, innovation isn't just about new technology - it's finding ways to work with others to address environmental challenges and achieve multiple benefits.

Innovation Resilience

Protecting chalk streams – Rivers Wandle and Hogsmill

There are catchments which need additional protection due to the fragility of their ecosystems, the historical impacts of abstraction and because they are rare habitats. We have been working with the South East Rivers Trust, the Environment Agency and Thames Water to develop solutions to restore the chalk streams which flow from the spring line between the North Downs chalk and London Clay.

We already augment the flows into both the River Hogsmill and River Wandle to protect trout spawning habitats, maintain a healthy ecosystem and provide recreational benefits to the surrounding community. However, we know more work is needed, and we will carry out river restoration measures that will enhance the rivers, in particular by allowing fish to pass freely upstream to their spawning grounds.

This will improve the resilience of the rivers by helping the species inhabiting them to withstand issues such as pollution, as well as helping to improve or prevent deterioration of the rivers' classification status under the Water Framework Directive. We have also introduced an Abstraction Incentive Mechanism (AIM) scheme which will limit abstraction from groundwater sources that have the greatest impact on the River Wandle during periods of low groundwater.

Tackling metaldehyde

Metaldehyde is difficult to treat using conventional pesticide removal processes and since the raw water challenge was first identified in 2008, we have looked to manage the risk by reducing the concentrations abstracted in to our raw water storage reservoir at Bough Beech.

In the absence of a suitable on-line detection method, our in-house laboratory developed an innovative fast analysis method to enable us to manage abstraction on a daily basis, avoiding the peak metaldehyde concentrations in the river and reducing the concentrations present for treatment.

We have engaged with many different stakeholders that have a role to play in supporting the farming community and have also worked directly with local farmers who have a direct influence on the quality of the water in the River Eden, which we store in our reservoir. We're encouraging them to use alternative products that do not impact water quality and challenge treatment in the same way – to improve the quality of the river and support compliance.

Linking water, energy and the environment

Elmer Treatment Works is in the north west of our supply area and is one of our larger treatment works, responsible for around 15% of our energy consumption.

We plan to deliver a new education centre at Elmer which will augment our current education and outreach programme, undertaken primarily at our Bough Beech site in Kent. Additionally, we are collaborating with Surrey Wildlife Trust on our commitment to increase biodiversity at Elmer – and will work to achieve the Biodiversity Benchmark accreditation for the site by 2025.

Elmer will become a flagship site, accessible to our customers, demonstrating not only the importance of water, but also how we manage our impact on the environment and the communities we serve.

In support of this ambition, we are collaborating with a partner on developing 'Energy as a Service' – taking a holistic view of energy assets and consumption at Elmer to identify opportunities for greater energy efficiencies, reduction in greenhouse gas emissions, increased resilience and additional value from energy. These will lead to innovative funding models for investment which will ultimately deliver better value to our customers.

This innovative and integrated approach is not yet embraced in the water sector and, through its delivery, will help us bring the linkage between water, energy and the environment to life.

Key challenges for the future

We are proud of our strong history of environmental stewardship but recognise that to deliver resilient services in the future and support the Government's aspirations in its 25-Year Environment Plan, there are some key challenges we must address, including:

- Population growth – managing the impact this will have on demand for water and the environment in general within the region, and more broadly
- Climate change – the predicted variance from traditional weather patterns, the likelihood for more frequent, extreme weather events, and the impact both could have on our operations, the environment and service to customers
- Customer participation – competing for the limited time people are willing to dedicate to a myriad of environmental considerations and concerns – from recycling and access to open spaces to fossil fuel alternatives and the cost of going 'green'
- Sustainable abstraction – ensuring that the amount of water we take from the environment is not resulting in harm and acting to ensure our abstractions are sustainable in the long-term
- Post Brexit environmental legislation and framework – it is yet to be seen how our exit from the European Union will influence future environmental legislation but factors such as the Common Agricultural Policy reform are likely to impact on how we operate.

What matters most to our customers

During phase one of our engagement programme customers and stakeholders told us:

- They value local rivers and wetlands and expect us to do our bit to protect and improve where their water comes from
- Serious pollution is unacceptable
- Be future-focused to address climate change and environmental concerns
- Work with schools to engage the next generation of water users
- Help customers take control of their water use and bills.

During phase two of our engagement programme they told us:

- We have a prominent role to play in changing customer attitudes, highlighting the scarcity of water and educating them to adopt water-saving behaviours
- Stakeholders said that they hope we will foster a more ambitious environment and community agenda
- They are willing to pay for the wider roll-out of our metering programme
- Metering must go hand-in-hand with water efficiency and support for customers
- They don't want us to reduce our education activity, but we must be mindful of their appetite to fund more.

During phase three of our engagement programme they told us:

- We should aim to be more ambitious on reducing people's usage and as a result we are targeting a reduction in per capita consumption of over 7% by 2025
- We should do more to reduce leakage, so we are targeting a 15% reduction by 2025.

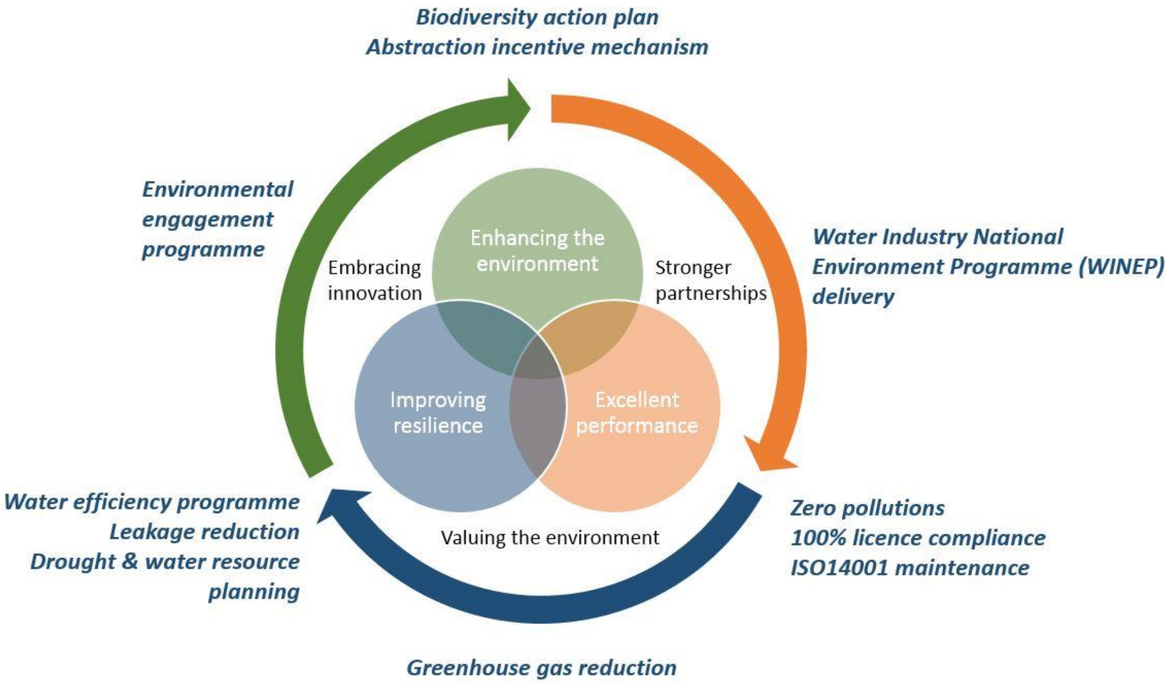
Delivering our pledges – our environmental strategy

Our environment strategy will contribute to the achievement of a number of our Business Plan pledges, and is fundamental to achieving our pledge to support a thriving environment we can all rely upon and the associated targets we have set to:

- Use more renewable energy and manage greenhouse gas emissions
- Strive never to cause serious pollution incidents

- Act to reduce the impact of our abstraction in sensitive areas when groundwater is low
- Increase the biodiversity of the land we own
- Improve rivers in line with the Environment Agency's requirements.

Our strategy will deliver the expectations set out in WISER and aligns with the requirements of the Government's 25-Year Environment Plan. Set out below, and using an adaptation from WISER, our interpretation shows how our environmental strategy – and the activities within it – maps onto our environmental regulators' expectations for good practice:



Below is a short summary of each of the four pillars of our activity that will contribute to us delivering our environmental strategy over the 2020 to 2025 period.

Leaving more water in the environment

Taking too much water from the environment can cause harm to habitats and the wildlife that rely on them. As the population we serve increases and we experience the impact of climate change, it is important we do what's possible to ensure more water is left within our rivers, streams and underground sources to support the habitats and wildlife that depend on them. These sources are a critical part of our water supply infrastructure, so by making them more resilient, particularly to drought, it helps support our pledge to provide a service fit now and for the future. Our customers use more water than most other areas of the country, and whilst we have one of the lowest levels of leakage, it is still too high. We know there is more we can do to reduce the volume we abstract and leave more water in the environment.

Our aim:
We have set ourselves stretching targets and will take a three-pronged approach that includes:

- Reducing leakage by 15% by 2025 and by at least 50% by 2045
- Reducing daily per capita consumption (PCC) from 145 to 134 litres by 2025 and to 118 litres by 2050

- Reducing the impact of our abstraction by switching to more sustainable groundwater sources dependent on prevailing weather conditions and resource levels

Our targets for leakage and PCC have been shaped by a combination of knowing we should be doing more to reduce demand, customer and stakeholder support to do this and the longer term recommendations made by the National Infrastructure Commission earlier in 2018.

How we'll deliver:
To achieve our aim to leave more water in the environment, we will:

- Improve our activity to detect, find and fix leaks – doing more and taking less time to complete repairs, improve the way we manage pressure in our network and accelerate the targeted replacement of our most problematic water mains, so the amount of water lost from our network reduces
- Adopt a universal metering approach, including fitting a proportion of smart meters and increasing the proportion of our customers that have meters from 60% to 90% by 2025. Having a meter is estimated to reduce consumption by around 14% and will help identify leaks on customer pipes
- Work in partnership with housing associations, charities and community groups to provide a joined-up water saving experience to customers through our home visit programme which includes water and energy saving advice, retrofitting water saving devices and leak checks and repairs
- Ensure that our abstraction activities at two boreholes associated with the headwaters of the River Wandle and the chalk habitats are as sustainable as possible
- Enhance our collaboration with neighbouring water companies through the Water Resources in the South East (WRSE) group to identify the strategic resources and transfers that will increase regional resilience and ensure that the environment in the south east is protected in the long-term, as well as conducting joint activities including water efficiency and drought planning
- Work with Government and our regulators to drive changes to existing legislation and regulations including establishing a mandatory water labelling scheme, enforcing the requirements for clear differentiation between small and large flush toilet volumes, setting a requirement for all publicly-owned buildings to report on water usage and co-ordinated, national water efficiency campaigns.

Reducing energy use, embracing renewables and managing greenhouse gas emissions

All energy that we use has some form of impact on the environment, so ensuring it is used efficiently is key to our strategy. Energy is also critical to ensuring we can maintain services to our customers, so our supplies must be resilient. Behind paying our people it is our second highest operational cost, so effective management of our energy needs contributes to delivering a more affordable service over the longer term.

The UK energy market is changing rapidly and by 2025 it will look very different to today, so our energy strategy is focused on transforming our approach to energy and carbon management to mitigate the risks posed and capitalise on the opportunities. This will see us embrace new technologies and have a greater dependence upon renewables, which will help deliver long-term resilience to customers whilst minimising our impact on the environment through the reduction of carbon and greenhouse gas emissions.

Earlier this year, we took the decision to move to purchasing all our electricity from renewable sources. This will result in our emissions being almost 90% lower than they were in 2015.

Our aim:
We have already minimised greenhouse gas emissions from our water supply operations, so our aim is to maintain our emissions per megalitre of water we supply at this new significantly lower level over the 2020 to 2025 period. As a company with a conscience, we'll also work to help reduce the wider carbon footprint resulting from water use.

How we'll deliver:
Led by our energy and carbon manager, to achieve the aims of our energy strategy we will:

- Further reduce energy use by up to 9% from current levels by continuing to install energy efficient technology in areas including pumping, heating and lighting
- Continue to purchase and use electricity that has been generated by renewable sources, backed by Renewable Energy Guarantee of Origin certificates (REGOs)
- Trial the use of electric vehicles within our fleet and take opportunities to expand the trial if improved vehicle charging infrastructure and lower vehicle costs materialise
- Identify opportunities to use our land for renewable generation or battery storage - such as at Bough Beech and Elmer Treatment Works – and explore the possibility of a site being capable of becoming self-sufficient by generating 100% of its energy needs
- Use innovative commercial arrangements to facilitate balancing of our generation and demand to avoid market peaks, reducing our costs and supporting decarbonisation of the grid
- Undertake life cycle assessments of the goods and services we buy from key suppliers to better understand their overall impact – embracing emissions, waste management, use of natural resources and embedded carbon.

More broadly, our work to reduce leakage and usage will reduce our emissions in treating and pumping water. Using less water will help customers reduce their energy use too.

We will also continue initiatives with local groups such as Refill Redhill, to reduce the amount of single-use plastic bottles as restaurants, cafes and other businesses improve access to free tap water. There are over 150 refill locations already in place across our area and we intend to work with other groups to increase this number, including at our Redhill head office.

Enhancing biodiversity and the catchments we operate in

We are required to meet a range of environmental obligations set out primarily within European legislation and directives. The release of the third Water Industry National Environment Programme (WINEP3) identifies the investigations, improvements and measures to prevent deterioration needed to meet the Water Framework Directive (WFD) objectives and other legislative drivers related to water resources, water quality and biodiversity.

We own and operate more than 60 sites, totalling around 330 hectares of land (or 0.4% of the area we serve), and our operations are reliant, and impact on, the health of the region's rivers and streams. This provides both the potential and requirement for us to protect the environment, enhance biodiversity and improve the catchments we operate in.

To achieve this, we need the appropriate systems, processes and controls in place to ensure compliance with our obligations, as well as understanding the opportunities to make enhancements.

Our aim:
We have set ourselves three targets for 2020 to 2025:

- Achieve zero category 1 or 2 pollution incidents to land, air or water
- Delivery of the required scope of the WINEP3

- Achieve Biodiversity Benchmark status at three sites

How we'll deliver:
To achieve our catchment and biodiversity enhancement targets we will:

- Maintain compliance with all licences and permits, and rigorously investigate environmental 'near misses' to reduce the probability of non-compliance or category 3 pollution incidents
- Deliver on our obligations across each of the 24 investigations and projects within WINEP3 at or ahead of time and where possible, in partnership with key stakeholders
- In conjunction with both Surrey & Kent Wildlife Trusts, develop and deliver site-based plans comprising a range of operational measures and additional interventions to achieve Biodiversity Benchmark status at three sites

Engaging with our customers

Vital to our ambition to support a thriving environment we can all rely upon is the ongoing engagement with both current and future customers on water-related issues to increase their awareness and participation. We have run an education programme for almost 20 years which has proven both popular and, we believe, successful in its aim to encourage our customers to use less water.

We intend to continue with this as a key element of both our community engagement and environmental strategies as it's something that our customers clearly support. Our challenge, however, is to make this programme more accessible – both in terms of location and content – in order to increase its reach. With ongoing funding challenges to state schools, many are now unable to afford the transport costs of making the trip to our Bough Beech education centre, situated in the far south east of our area. In addition, due to the nature of the water treatment process at the site, the focus of the programme lends itself primarily to Key Stage 2 (KS2) pupils.

Our aim:
Education is a key enabler to a range of performance commitments over the 2020 to 2025 period, primarily our commitment to work with customers to help them reduce their usage.

We plan to extend our education programme with a second centre at our Elmer Treatment Works, situated close to key transport links and population centres in the north west of our area. This centre will complement our existing Bough Beech offering and providing two facilities in two different areas will support a material increase in engagement of current and future customers.

How we'll deliver:
We will:

- Further invest in our Bough Beech education centre to improve facilities, modernise the learning environment and increase flexibility and capacity
- Create a new purpose-built facility at Elmer Treatment Works
- Work in partnership with other organisations to provide content (river and wildlife trusts) or equipment (supply-chain partners)
- Expand the offering at both centres to incorporate both the environmental (via Biodiversity Benchmark activities) and energy (via renewables strategy) dimension, and their intrinsic links to water
- Develop KS2 and introduce Key Stage 3 and 4 specific materials and resources, as well as explore activity for pre-school children

- Extend the outreach programme to pupils both before and after their visits to the centres, and provide cheaper, in-classroom offerings for those schools that are unable to travel
- Find new ways to engage with future generations – and their bill-paying parents - directly, outside of our school relationships. This will include more family open days at more treatment works, as well as other groups like cubs, brownies and local library holiday clubs.

Conclusion

Our environment strategy underpins many of the targets within our business plan and we are increasing our ambition in-line with customer priorities and expectations and the long-term aspirations of the Government. The four pillars of activity are discrete but there are important inter-dependencies between them. By progressing them together we will achieve our objectives to protect the environment and reduce the impact we and our customers have on it, while actively improving our environment in areas where it will benefit our customers.

We are confident that our environment strategy contains all the requisite elements to ensure compliance with both the WINEP and WISER, and its intent is fully aligned with that set out within the Government's 25-Year Environment Plan.

CHAPTER 10

Our people

Our committed and skilled employees are at the centre of delivering our pledges to customers

In this chapter you will hear about

- Our workforce today and the challenges we are facing for the future.
- The four elements of our people strategy that will help us meet these challenges and create a working environment that helps our people be the best they can be.

Our people

Our people are our greatest asset and an engaged and supported workforce will deliver great service. It goes without saying that the safety and wellbeing of our employees continues to be one of our highest priorities and one we will not compromise.

As well as nurturing a culture that encourages innovation, we will create a working environment where people thrive and strive to do a great job. From attracting and retaining great talent, to developing the right skills, to recognising strong performance, our people will be at the centre of delivering our pledges and will strengthen our contribution to our local communities, enhancing our legitimacy with those we are privileged to serve.

Our people today

We are a small, local company and this is reflected in our workforce with many living in our supply area amongst our customers, which means our employees know them, care about them and the service they receive. We can trace our origins back to the mid-19th century and throughout this time and today we have dedicated people who regularly go the extra mile to deliver. Our average length of service demonstrates their commitment and loyalty in an ever-changing market and we know this is a key strength in understanding our business inside out and it's a major contributor to our strong performance. However, we believe we strike a healthy balance between the experience of long-serving staff and the challenge and positive disruption that new employees bring.

Our people in numbers (on 1 April 2018):

294 employees (199 males, 95 females)
29 part-time employees
9 years – average length of service
13.4% employee turnover rate per year
15.8% gender pay gap

Our vision of being an outstanding water company that delivers service excellence is supported by six values which define who we are, guide our behaviours and underpin everything we do:

- Service – we put our customers first and take pride in our service delivery
- Compassion – we care about the effects of our actions and seek to make a positive impact on the community
- Commitment – we are passionate about our work, act responsibly and care about quality
- Innovation – we seek to improve our business to be forward thinking and to embrace change
- Collaboration – we are respectful, welcome diversity and are supportive of each other to achieve our goals
- Integrity – we are accountable, ethical and trustworthy.

We have hundreds of examples of our employees bringing our values to life every day and they are given an award which recognises someone going the extra mile for our customers.

Our values in action - service

Laura Allen in our Retail Services team spoke to a customer who was unhappy with the leak adjustment he had received. She managed to calm him down, explain the process step-by-step and the customer was very satisfied with the help he received: "I would like to take the time to acknowledge absolute customer satisfaction. I was a difficult customer and frustrated with bill after bill, having had a leak and just moved into a new property. Laura's patience and more so expertise in such a complex field was fantastic. I am passionate about customer service and it's the line of work I am in. I can count on one hand over 20 years those that genuinely are experts in their field, care and have the personality to bring a frustrated customer around."

February 2017 saw us achieve the Investors in People (IIP) gold award within only a year of being awarded silver. They are not given out lightly – only 5% of accredited companies achieve gold and this independent assessment endorses the many great things we do to lead, manage, develop and support our people. Examples cited included our excellent appraisal training and succession planning system. IIP recognises the enduring effort that goes into making our company a better place to work and the scheme has added real value in helping us understand our capabilities.

Our employees tell us that they are proud to work for us and this is measured through our employee engagement surveys which we established in 2011. Our annual survey in December 2017 showed that 62% of employees were satisfied and we are increasing this number through the actions in our 'Employee Engagement Manifesto' which is led by our directors and covers four key areas: making your working life easier, senior leadership vision and visibility, realistic and effective change implementation and reward and recognition. Department-level action plans are also developed, tracked and delivered following each survey.

We have an excellent track record of 'growing our own' through internal promotions and transfers and have always been able to successfully respond to operational challenges.

It's more than just a job to me

James Ratcliffe, Production Engineer, has been with us since 2012, working his way up from Engineering Operative and completing an engineering degree along the way:

"I love working here and am proud to tell people I work for a water company, and specifically SES Water. We are integral to the fabric of the community and that's what makes it more than just a job – lives depend on what we do and how we do it. I use the water we produce every day at home and so does my family, which is another reminder of how essential our service is. I have a very old photo on my desk of a man standing proudly next to a water main he's built and I like to think in the future there will be a picture somewhere of me doing the same, playing my own part in our history."

The challenges we're facing

Our employees are critical to our ability to continue providing our essential public service which is why we must understand how our workforce could be impacted by the changing world around us. Where there is uncertainty we must plan ahead, so we are ready to adapt to meet the challenges and grasp new opportunities so we can continue to provide excellent service.

We have identified four key challenges that are relevant now and will continue to impact us between 2020 and 2025:

Our aging workforce and the potential for knowledge loss

The average age of our workforce is 41 with 25% of employees in our wholesale department aged over 55. An older age profile can have benefits as well as drawbacks. Experience is key, but this can also sometimes lead to a more traditional approach that does not always align with modern ways of doing things. Working in water for a long time builds up a huge amount of very valuable knowledge which would ideally be passed down to a pipeline of young talent coming up through the ranks to learn from their more experienced colleagues and intending to stay with us until their own retirement. However, the water and wider utilities industries is facing a shortage of science, technology, engineering and mathematics (STEM) skills, both in this country and worldwide. STEM fields have also been predominantly male occupations with historically low participation among women – just 21% of the core STEM workforce in the UK are women (WISE UK statistics 2016).

Changing employment patterns

Over the last 25 years the make-up of the UK's working population has changed considerably which impacts on our need to attract, retain and develop our people:

- Prevalence of short-term contracts and freelance work compared to permanent jobs
- Lengths of service falling, increasing turnover rates. The Deloitte Millennial Survey 2018 found that of the 10,455 'millennials' (individuals born between 1983 and December 1994) surveyed, 43 per cent planned to leave their current job within two years and only 28 per cent planned to stay beyond five years
- Multiple recruitment streams – apprentices, industrial placements, gap year students, paid internships, second jobbers, experienced hires, part-time workers – means that historic approaches to hiring and developing staff must adapt accordingly.

Our gender pay gap, although lower than the national average and not unexpected in our industry, still needs closing to create a more diverse and balanced workforce which ensures equal opportunities for all employees and reflects the customers we serve.

Increasing customer expectations

We want to not only do what is expected of us by our customers, but go above and beyond to 'surprise and delight'. Providing exceptional rather than acceptable service is voluntary - it demonstrates a genuine desire to do the right thing which means having employees that are not only skilled to do their jobs, but believe in our service ethos and become ambassadors for our Company. Historically we have focused heavily on technical skills but that alone will not bridge the widening gap between what our customers want and what we deliver. Raising the bar will depend on changing what we do and this will affect many policies and processes such as shift patterns, training programmes and recognition schemes.

Changes in technology

Keeping up-to-date with technology is crucial for every company and we are no exception. That means having employees who embrace change and are quick to adapt to new solutions and systems.

Supporting our pledges: our people strategy

We are confident that our people strategy will ensure that we have the capability and capacity in our workforce to address these challenges and deliver our ambitious plans for the next five years and beyond. We know the important role a skilled workforce plays in ensuring that we are operationally and financially resilient now and in the future.

We want to continue to create an environment that we all feel proud to be a part of, and we know that by focusing and delivering on the themes in our strategy, we will make our business an even better place to work.

Key to the success of our strategy is the employee involvement in creating it. We have held workshops and attended team meetings to ensure it reflects contributions from all levels within our workforce and our Board is fully sighted and committed to its delivery.

Our strategy has four key themes:

Attracting, selecting and retaining our workforce

We will:

- Widen our use of the Predictive Index (PI) tool for personality and job profiling to support recruitment, selection, individual and team development as well as conflict resolution. This will include training all line managers, so they better understand what behaviours jobs require, what motivates people and drives them to perform at their best and what to do to keep individuals and teams productive and engaged
- Build on our succession planning process with a leadership programme and a 'young leaders' development initiative with identified career pathways
- Create 'Welcome Ambassadors' to ensure that new recruits have the best possible start to their career with us
- Improve diversity by re-defining our resourcing strategy to formalise routes into the Company such as undergraduate placements, graduate schemes and building on our apprenticeship approach
- Join with other water companies in adopting the Industrial Cadets scheme, an industry accreditation for workplace experiences where young people take part in an activities programme mapped against a skills and competency framework. It provides

a mutually beneficial approach to work experience that will improve awareness of our career opportunities with school leavers
- Collaborate with other companies in the sector as appropriate to share learning and maximise any investment in attracting and retaining great talent to the industry. For example, we will be using Severn Trent Water's new training facilities in Coventry
- Get involved in other ways of raising awareness of what we can offer, including an 'employability' smartphone app for school leavers through a local business leaders group.

Growing our own by supporting high performers

Joining as a water quality sampler straight out of college 11 years ago, Liam Ahearne is now one of our treatment works managers. He's worked hard to progress and has been supported every step of the way:

"I feel really lucky to be in the position I am today and am grateful for the investment that the Company has made in my future. In 2007, I began studying for an NVQ in Water Treatment and as part of this I regularly covered shifts for the plant operators at treatment sites. Three years later and I became a plant operator myself, which I did until I was offered the opportunity to temporarily act up as a treatment works manager to oversee the day-to-day running of Cheam Treatment Works while the manager there looked after the significant redevelopment of another site. I am now a substantive manager and over the years have achieved many qualifications, from health and safety certificates to the ILM Level 3 and a postgraduate certificate in leadership and management, all paid for by the Company. As I now work to achieve my personal development plan, a director is mentoring me and I feel very positive about the future and how more employees will also be able to progress their careers here like I have."

Enabling, recognising and rewarding great performance

We will:

- Invest in a job grading/evaluation system which gives greater clarity over our pay bands and enables us to be even more effective with career progression and equal pay opportunities
- Work with our employees to develop and implement a system that better links performance to pay and other rewards
- Work to close our gender pay gap by continually challenging ourselves to be more inclusive. This will include reviewing our recruitment processes and evaluating our appraisal system to ensure that capable employees, regardless of gender, can progress
- Invest further in reward and performance management by introducing a new performance appraisal system and training for all managers to support them in having productive performance discussions with their staff
- Encourage a healthy work/life balance by continuing to explore even greater flexibility, including more remote working, tailored work patterns and collaborating with our supply chain.

Training, developing and growing all our people

We will:

- Continue to recognise that the health of our employees is just as important as their physical safety with 'Aqualibrium', our employee wellbeing programme. We will focus our activity and extend its scope to prioritise common issues such as encouraging more middle-aged men to embrace the benefits of free annual health checks
- Further embed our Mental Health First Aiders who have been specifically trained to spot the signs of mental ill health and feel confident to guide someone to appropriate support
- Continue to invest heavily in our workforce so that they have the technical, safety and behavioural skills to ensure we deliver great service, make safe decisions and create an environment that encourages innovation and creativity
- Broaden our apprenticeship programme and increase the quality and competence of existing employees through the apprenticeship levy. We'll also play an active role in the Energy and Utility Skills (EU Skills) group
- Widen our 'Baseline' training - a modular based programme covering assets, network management and leakage management – to non-operational colleagues to increase their understanding of what we do and help identify high performers
- Work with a specialist partner to progress our behavioural training, focusing on what's most important to customers and steering away from traditional approaches in favour of bespoke activity that meets our needs
- Enable our employees to put their skills to a different use for the benefit of the community with our 'SkillShare' programme (see the Community Chapter).

Resilience

The value of apprenticeships

Ryan Flint didn't know what he wanted to do when he left school but had always been interested in electronics. He joined us in 2011 as an apprentice Mechanical and Electrical Technician with a BTEC in Electrical Engineering:

"My first two years in the job was a helpful balance of going to college and working at a treatment works while I completed my Higher National Apprenticeship Qualification to become a qualified Mechanical and Electrical Technician. It was really hands-on and gave me a great opportunity to learn about the water treatment process. I've now moved into the engineering team in a role I'm very much still learning but surrounded by a supportive, experienced and generous team, I'm confident I can develop into a skilled engineer. My time here has lived up to all my expectations and apprenticeships are a fantastic way of building a career, especially when you're not sure where to start."

Engaging, including and empowering colleagues

We will:

- Better understand the diversity of our organisation by collating data on our workforce to measure the success of interventions we make to improve our diversity and how inclusive employees feel we are

- Overhaul our Joint Negotiating and Consultative Committee (JNCC) to shift the focus from discussions on pay, policies and working conditions to more directly contributing to us being a well-run, respected and successful business. Employee problem-solving groups will ensure representatives feel their voice is being heard and they are directly involved in important decision-making
- Measure the engagement of our employees every three years, in-line with our IIP re-accreditations, and take regular 'temperature checks' in between to be more responsive to potential issues.

A perspective from our Joint Negotiating and Consultative Committee

Sonia Cleary took on the role of the JNCC chair three years ago and knows the group can do more to add value to the business:

"Seeing the thoughts, ideas and views from the committee leading to positive action is really important and shows members that their contribution is worthwhile. Like many other companies we are going through a lot of change and the key to success will be involving us as early as possible to help shape decisions before they are made – we're 'in the thick of it' every day so really understand the challenges we are facing. Working together in a collaborative way is the key to engaged employees and satisfied customers."

Measuring success

Essential to the delivery of this strategy – and the performance of our business – is the ability to measure our progress on the actions we take. Creating and maintaining a high-performing team is a process that requires constant attention and will evolve over time. We will need to be agile in assessing our success so some metrics will change but a core set, including our performance against our commitments to customers, will be maintained to consistently measure progress over time.

Attracting, selecting and retaining our workforce: - Quantity and quality of candidates wanting to work here - New starter questionnaires and exit interviews - Funds offset through the apprenticeship levy - Annual turnover rate	**Enabling, recognising and rewarding great performance:** - Investors in People re-accreditation scores - Promotions, transfers, secondments - Performance appraisals
Training, developing and growing all our people: - Risk mitigation to a satisfactory level - Health and safety incidents - Aqualibrium health check data - Compliance checks, including external audits	**Engaging, empowering and including colleagues:** - Employee engagement temperature check results - Attendance rates - Customer satisfaction feedback

Conclusion

We face many of the same challenges as other companies in our industry and outside it but meeting them depends on exploiting our unique strengths and being quick to adapt which is something, as a small company, we can do.

We already have a committed workforce who are innovative and flexible but we cannot expect this to always be the case. That's why our people strategy – and its detailed delivery plan – sets out what we will do to ensure we have a sustainable workforce that can meet the needs of our customers now and in the future.

CHAPTER 11

Community

We are a small, local company with a long heritage and deep roots in the communities we serve

In this chapter you will hear about

- How the prosperity of our business is linked to thriving communities and the part we can play.
- Our aim of attaining the CommunityMark from Business in the Community.
- How the four elements of our strategy – time, money, expertise and consideration – will add value.

Our community

We can trace our origins in the local area back to the mid-19th century and we are proud of our long heritage as a small company, deeply embedded in the communities we serve. Indeed, compassion is one of our six values and promises that we care about the effects of our actions and seek to make a positive impact on the community.

We are not seen as just a supplier of water and we don't want to just deliver great service for customers – we want to play an active part in improving the areas we are privileged to serve.

The legitimacy of the water industry has been challenged lately, which is less about the value for money or reliability of service and more about transparency of companies' ownership and governance structures. We have always placed a great emphasis on being an accountable, accessible local company, trusted to provide an essential service and increasing our community activity will help strengthen this view with our customers and stakeholders.

For a company like us, being an active part of the community isn't a 'nice to do', it's essential to the long-term resilience of our business and our customers expect it of us. Through our engagement programme we have heard consistently that education and support for customers is essential and they value our role as a local company.

Our community strategy therefore aims to support the delivery of our five pledges by:

- Demonstrating the importance of broad and deep community relationships, even as a monopoly service provider
- Working with our customers to help them understand more about where their water comes from and play an active role in reducing demand for this precious resource
- Explaining the challenges we face, what we are doing to address them and inviting communities to help us
- Gathering timely and informed feedback on our service and engendering more supportive relationships, especially during periods of disruption
- Helping to shape our plans for the future
- Attracting future employees

Measuring our progress

In order to plan and prioritise our activity, we will go through the independent, rigorous process to hopefully be the first water company to attain the CommunityMark – the UK's only national standard from Business in the Community that publicly recognises leadership and excellence in community investment.

We believe that achieving this accreditation – and being committed to retaining it – will not only provide independent, external validation of all our efforts to date, but more importantly challenge us to go further. The Mark will require us to maximise our positive impact on our communities and ensure that everyone, at all levels within the Company, recognises and values the difference we can make.

The five principles of the CommunityMark are:

- Identify the social issues that are most relevant to your business and most pressing to the communities you work with
- Work in partnership with your communities, leveraging your combined expertise for mutual benefit
- Plan and manage your community investment using the most appropriate resources to deliver against your targets
- Inspire and engage your employees, customers and suppliers to support your community programmes
- Measure and evaluate the difference that your investment has in the community and on your business. Strive for continual improvement.

How we'll do it

Our community strategy recognises that the prosperity of our business is inextricably linked to the prosperity of society – and we can play a part in building thriving communities. We believe that the more we give, the more we'll get back through strong and productive, two-way relationships. This could be evident through customers helping us save water, more people helping to spread our important messages, increased satisfaction with our service, a healthier environment we can all rely upon and by exciting and inspiring the next generation of water users and employees.

Our strategy includes:

Giving time

Our 'Give-A-Day' scheme sees our employees, many of whom live locally, getting out and about giving their time to worthwhile community projects. From litter-picking in local rivers to helping elderly people with their Christmas shopping, our people are keen to contribute where they can.

We know we're not alone in wanting to give back, so we will do more with other organisations wanting to do the same. Through intermediaries such as Community Action Sutton, Voluntary Action Reigate & Banstead and local foodbanks, we will get more involved in the voluntary sector in our area. This will also help us reach more customers who would benefit from some extra support and make sure we are meeting their needs.

We also take our community trailer out and about to many local events and speak to thousands of people every year about water. Instantly recognisable, we see this as a key way of meeting our customers and finding out what matters most to them. This will be particularly important as we roll out our metering programme to raise awareness and engage with customers and communities about saving water.

Giving money

Donating money to local good causes has been given a boost with the introduction of our 'Rainy Day' Fund. We receive many requests for financial support and while we cannot say yes to all of them, our fund ensures we give meaningful support to the causes that are compatible with our business aims. Giving grants of between £500 and £3000 each year, we support projects that the community cares about and stay in touch with beneficiaries to hear more about the value we have added.

We also match-fund the individual fundraising efforts of our employees and seek to build long lasting relationships with local charities that go beyond just giving one-off donations.

Giving expertise

Our externally accredited education programme is completely free of charge and has seen thousands of adults and children learn more about the value of water. We have invested significantly in trained tutors and high-quality resources which sees the same teachers return time and time again. Never complacent, the programme is continually evolving and we are using feedback to make it better. Between 2020 and 2025 we plan to develop a new, purpose-built education centre to enhance what we offer and increase our reach.

Education is not just through schools though, we share our knowledge with others too. Our free 'Wise About Water' talks see us visiting local community groups talking all things water and in particular ensuring that our older customers know about the extra support we can offer.

Our greatest asset is our committed workforce who have a wealth of skills that can add value to small, local charities in need of extra support. From teaching someone how to use a computer to proof reading and mentoring, our 'SkillShare' programme gives employees the opportunity to put their expertise to greater use.

Giving consideration

As part of our essential operations we always strive to limit the disruption we sometimes inevitably cause from activities like laying new pipes and upgrading treatment works. For instance, a group of guides and brownies in Horley are enjoying safer access to their meetings now thanks to us laying a new driveway outside their hall whilst we were renewing a water main nearby. Likewise, students – and their parents – were a lot less stressed during the busy exam period when we worked closely with their local school to re-sequence road closures to only take place in the holidays.

We will put our customers at the heart of our decisions and go that extra mile to help them.

Summary of our strategy:

Time	• Give a Day Scheme • Community events • Supporting the voluntary sector
Money	• 'Rainy Day' grant funding • Match-funding employee fundraising • Charitable donations including WaterAid
Expertise	• SkillShare Scheme • Our education programme
Consideration	• Balancing the disruption of our work by giving something back • Making our sites attractive to plants and animals

All of this, and more, will be considered as part of the CommunityMark assessment where we will need to demonstrate our proficiency against the five principles to the Independent Approvals Panel comprising senior individuals from business, government and civil society.

To ensure that our ongoing activity in the community adds as much value as possible, we are committed to learning from other organisations that do this really well through local networking events and social value workshops where best practice is shared.

Conclusion

Building broader and deeper relationships will help us increase our engagement about a subject that most people take for granted every day. Our strong performance record means that people do not have to think about their water supply and rarely ponder where it comes from – and that needs to change for us to meet our long-term challenges. While we may not be top of mind for our customers, they will be interacting more regularly with other organisations – such as advice agencies, charities or interest groups – so our relationship with these intermediaries is important.

We have also learnt that getting more people to 'Talk on Water' means ensuring that our messages are understandable and inviting for the audience. That's why we have produced easy-to-digest versions of our Annual Report, Long-Term Vision, draft Water Resources Management Plan and draft Business Plan and will continue to make our communications engaging for communities.

Our community relationships will also help us continue conversations with customers and stakeholders beyond this price review which is a key part of our engagement strategy, so we are gathering regular insights to inform what we do.

Quite simply, being a socially responsible organisation with a corporate conscience is who we are. We are proud to have played an important part in people's daily lives for well over 150 years – but we don't just supply water. Importantly, our customers expect us to make a valuable contribution to their communities too. This has come out loud and clear at every stage of the business plan engagement programme and we have listened by committing to do even more.

CHAPTER 12

Data strategy and assurance

Ensuring that our plan delivers what it needs to

In this chapter you will hear about

- How our Board has assured what we plan to do.
- How our Board has assured that our plan is high quality and that we can deliver it for our customers.
- The accuracy and consistency of the evidence we have used to build our plan.

Data strategy and assurance

The Governance Chapter describes our approach to Board leadership, transparency and governance in all its aspects, and explains what approach we currently take and the latest set of enhancements we are now introducing. This chapter focuses on how this approach to governance has been applied to the development of our Business Plan, and how it underpins the comprehensive assurance statement that has been signed by all members of our Board.

As a small company, executive management have close personal involvement in service delivery and this benefits assurance as they are able to assess the reliability of underlying information in submissions and reports from personal experience. This closeness to aspects of business performance also extends to those trusted with the governance of the business, with non-executive directors taking the lead in challenging, supporting and mentoring executives, managers and employees in areas of particular expertise. Both these small company qualities have proved invaluable in the governance of our plan.

Our strong track record

We have a strong track record in producing high quality data and our plan has been prepared under the governance and assurance arrangements that have served us well for many years.

We have embraced Ofwat's Company Monitoring Framework as a way of demonstrating to a wider audience the consistent focus and care we devote to the production and dissemination of reliable performance information. The overall reliability of our processes has been recognised in the solid assessments in the two annual reviews conducted by Ofwat to date. Although we have remained just outside the self-assessment category, the consistency of the assessments demonstrates that our underlying processes are sound and provide a solid foundation for the assurance processes applied to our plan.

Each year we produce an annual report, which includes externally audited data on both our financial performance and delivery against our targets, the assurance statement for which is on our website. It also includes a full report on the activities of the Board's Audit Committee which is responsible for matters relating to assurance.

We have maintained accreditation under the ISO 9001 Quality Management standards, which is monitored and updated by our compliance and assurance manager and subject to independent verification and re-accreditation. A key feature of these standards is the documentation and provision of evidence that processes have not only been defined to an acceptable standard, but are being followed in practice. This business-wide discipline provides a strong foundation for performance planning and reporting systems as well as for other critical business processes.

How we assure performance data

Our processes are well-established and start with a hierarchy of management controls, including:

- Appropriately trained and experienced employees compiling performance data in accordance with documented and well-understood procedures
- Reviews and verification of the performance data by other more senior employees
- External assurance by appropriately qualified, objective and experienced third parties.

Our quality and compliance director oversees our non-financial assurance. Shareholders have also reviewed business controls more generally, including a detailed review of 83 control items in 2014, with subsequent annual updates.

The responsibilities of our Audit Committee include reviewing the format and content of our interim and year end accounts and results announcements, as well as reviewing our annual performance reports submitted to Ofwat. The latest Audit Committee Report is available in our Annual Report 2018.

These processes have been applied to the assurance of our plan and will form the foundation of our assurance as we report on delivery of the plan and the pledges we are making.

Governance around business plan development

Our Board provides assurance that our Business Plan is high quality, deliverable and reflects the priorities of our customers, stakeholders, regulators and the Government. In doing so it has relied upon the following approach to governance around Business Plan development.

Executive team and the PR19 Steering Group

In January 2017 we established a PR19 Steering Group, chaired by our managing director, to coordinate the work being led by accountable managers in the development of our plan. It provides a forum for discussion of strategy and policy, insight from stakeholder and customer engagement and the environment for internal challenge of technical approaches and business cases. The Group is responsible for making recommendations to the Board and is the conduit for feeding back the strategic decisions and challenges made by the Board. Its terms of reference are available in Appendix A12.3 - PR19 Steering Group Terms of Reference.

Executive directors have been closely involved in the production of our plan from the outset, both in individual areas of responsibility and for the integration of our plan as a whole.

Our quality and compliance director has continued to be responsible for assurance of non-financial data and has remained independent of the development of the plan in general (although specialist input has been made into key water quality and compliance issues).

Engagement with our broad-ranging stakeholders

The PR19 Steering Group and Board has focused on ensuring that our plan will deliver the Government's strategic policies and objectives – securing long-term resilience, protecting customers and making markets work – as set out in its Strategic Policy Statement to Ofwat. It has considered how the plan takes account of the Government's 25-Year Environment Plan and the recommendations of the National Infrastructure Commission. It has also considered and acted on the guidance issued by Ofwat, the Environment Agency, Natural England and the Drinking Water Inspectorate to ensure our plan meets statutory and regulatory obligations.

It has assured itself that our plan delivers against these stakeholders' objectives by proactively engaging with them in the months and years running up to the planning period. This has been supported by a programme of meetings with our regulators – to enable two-way dialogue and clear understanding of expectations. Key messages from these stakeholders have been filtered down to those most closely involved in developing our plan to assure their requirements have been considered.

The Board's priority has been to ensure that our customers support our plan, understanding that it cannot be delivered without their support. We have carried out our most extensive programme of engagement to date to make sure we have developed a plan that delivers what matters most to our customers. Throughout our programme we worked with research and engagement experts to ensure we delivered a high-quality research programme and accurately interpreted the insight to inform our plan.

This process has been closely scrutinised by our Customer Scrutiny Panel (CSP) who has offered challenge and advice throughout. It has written an independent report into the quality of our engagement programme and the extent to which it has informed our plan.

Contributions from across the Company

The development of our plan has given many employees from all areas an opportunity to be actively involved in both developing our pledges and how we will deliver them (including the efficient level of expenditure incorporated into our plan). This is crucial as successful delivery is reliant on our employees being committed to what we want to achieve.

All employees have participated in round table discussions with our directors to discuss current performance and future plans, including the shape of the draft Business Plan we used for consultation with all stakeholders.

The principal inputs into performance targets and expenditure forecasts have come from the departmental managers who will be responsible for delivery of our plan. They have worked with third party advisers and our long-standing supply chain partners to identify the most effective and efficient means of delivery, taking industry best practice and efficiency trends as benchmarks. The efficiency initiatives incorporated into our projections are based on assessment of the potential to deliver operational and purchasing efficiencies.

External assurance of the plan

In completing the required data tables (see Appendix A12.1 - Business Plan data tables) we have relied upon our well-established procedures for managing data quality and assurance.

We have used a range of suitably qualified external assurance providers to give additional comfort that our plan is based on accurate and reliable data, which has been correctly reflected in our submission. External assurance providers were chosen based on a review of their knowledge of the sector and depth and breadth of experience. All inputs to data tables have been externally assured.

The starting point for completion of data tables has been historic performance data that has been subject to assurance (including third party assurance) as part of our ongoing performance reporting process. We have used the same external assurance provider for future performance measures – and expenditure forecasts – as we have for reported historic data, using their expertise in understanding our current performance and reporting mechanisms to accurately assess forecast future performance. Key features include:

- Review of all non-financial data including performance standards, cost drivers and associated expenditure levels and their allocation across business units by an external assurance provider. Actions were agreed in each review session and all actions were completed to the satisfaction of the assurance provider. It has expressed the opinion that the detailed planning and focus on service to customers is evident in our plan; that Ofwat guidance, where provided, has been adhered to; and that forecast values can be linked to the underlying data and assumptions

- A detailed set of agreed procedures have been undertaken by a leading audit practice to ensure that financial data has been assembled in accordance with Ofwat guidance, has been properly extracted from data sources (including Ofwat's own financial model) and has been accurately incorporated into data tables. In a detailed report of over 300 pages, some data inconsistencies were identified, all of which have been satisfactorily addressed
- The same team from the audit practice also listed more than 40 key assumptions being made in preparing inputs to the data tables. Each one of these assumptions has subsequently been reviewed by a separate regulatory advisory team from the same firm and assessed for reasonableness (as opposed to accuracy). In all instances the conclusion is that the assumptions adopted are not unreasonable.

The Board considered these independent assurance reports in agreeing to the plan being submitted.

Board engagement and oversight

The process outlined above has ensured that the full Board has been regularly and intensively engaged in challenging and satisfying itself that our plan is being developed in a comprehensive, well-governed and high quality manner, as evidenced by the time devoted to the programme by the whole Board:

- Dedicated strategic reviews at key stages in the development of our plan in February and September 2017, and February and July 2018
- A formal report from the finance and regulation director and a standing agenda item on the development of our plan at every Board meeting
- Meetings with the chairman of the Customer Scrutiny Panel.

The Audit Committee has also been very involved in the preparation of our plan, particularly in respect to assurance, including agreeing the scope, process and timetable for external assurance, together with ensuring that the external parties are appropriately experienced, objective and qualified.

The Board has established committees, chaired by independent non-executive directors, to focus on particular aspects of our plan, including strategy for financing, governance, pensions, energy and carbon management.

At an early stage, the Board agreed lead responsibilities for the four key themes among the chairman and each independent non-executive director. This has enabled more detailed engagement and challenge in a variety of ways including going to internal workshops, one-to-one sessions with employees and reviewing materials (including customer engagement and survey plans). A rolling programme of attendance at Customer Scrutiny Panel meetings by non-executive directors has ensured first hand engagement with the challenges of the panel.

Governance and assurance of delivery

This comprehensive process and extensive contribution from non-executives, executives and employees will safeguard the successful delivery of our plan and the operational, financial and corporate resilience that it is intended to deliver. Our plan explains in detail how this will be delivered and is briefly summarised below. We know that successful delivery relies on our customers' continued support for what we are doing and how we do it and we are therefore committed to continued, and where needed, enhanced transparency on these matters.

Delivering operational, financial and corporate resilience

We intend to build on the resilience in the round approach that we have taken, bringing together what are currently separate risk tools, so we continue to take a holistic view to delivering greater resilience. We plan to adopt this process fully in the near future, using it as the basis for our ongoing and longer-term resilience planning, as well as our shorter-term risk review and mitigation. This process will form a core element of our governance approach and will be monitored and reported on by our Audit Committee.

Enhancing trust and confidence

We are proud of our position as a socially responsible company that is deeply rooted in the communities we serve and we were heartened and reassured to hear customers talk about the value and importance they place on this. Key to building on this trust and confidence is being transparent about what we do and how we do it. This means creating opportunities for conversations with our customers and the communities affected by what we do.

Our plan is firmly rooted in the views of our customers and other stakeholders, taking a long-term perspective. It also commits to increased transparency around our performance (operational and financial) and our governance and decision-making processes.

We already carry out comprehensive reporting through our annual reports and are active in our local communities, which has been crucial to building relationships and creating opportunities for two-way conversations.

To support the business planning process we established an online community called 'Talk on Water' as a platform for ongoing dialogue. We are going to continue to use this as a test bed for improving our communications and to continue to deepen our understanding of customer views. This will be particularly important as we improve the information we provide on our corporate and financial arrangements – something we are committed to doing.

We have published accessible documents at key stages in the development of our plan, including our Long-Term Vision, draft Water Resources Management Plan and our draft Business Plan. A similarly accessible summary of this plan is being published at the same time as we make our submission to provide customers with an understandable outline of our commitments.

We will continue to keep our customers up to date on what we are doing through existing channels and look for new ones, as we have done with the creation of an online community. The first steps we will take to do this are explained in the Governance Chapter and includes a 'Our governance and finances explained' document to increase the accessibility and transparency of information.

Board assurance statement

Our Board takes its obligations for good corporate governance extremely seriously and dedicates time and expertise to ensure that the Board as a whole is able to fulfill its responsibilities. This submission has been prepared under the assurance processes applicable to all our regulatory submissions and performance reports. The Company's track record of performance reporting is strong and has been recognised as compliant with Ofwat's reporting requirements under the Company Monitoring Framework for both years upon which assessments have been carried out and reports issued.

The significance the Board has attached to good governance of this Business Plan submission is emphasised by devoting chapters of our 200-page main submission to governance and to assurance, where we describe in detail the approach we have taken. This assurance summary statement relies upon, and should be read in conjunction with, the detail provided there.

Our plan for 2020 to 2025 is firmly anchored in a much longer-term perspective. We have published a Long-Term Vision and have planned operational, financial and corporate resilience for the long-term. Our revised draft Water Resources Management Plan covers 60 years and our targets for leakage, bursts and supply interruptions cover multiple regulatory periods. We have stress tested our financial resilience to 2030.

Our plan is based upon a firm understanding of our customers' priorities, obtained through our close, regular dialogue with the communities we serve and through the deployment of best in class survey and engagement techniques. Our Customer Scrutiny Panel has had full transparency of the way in which customers' views have been reflected in our plan and has challenged us appropriately.

We have developed our plan in the context of the Government's Strategic Policy Statement and its 25-Year Environment Plan alongside the guidance issued by the Environment Agency and the Drinking Water Inspectorate. We have worked with other regulators and stakeholders to produce a plan that delivers benefits to our local environment and society at large, as well as meeting our statutory and regulatory obligations.

The whole Board has played a full part in the development of our plan. Our independent non-executive directors have acted as champions for the key themes of great customer service, affordability, resilience and innovation, and have attended workshops and meetings of our Customer Scrutiny Panel to contribute to debates. They have also chaired Board committees, established to focus on aspects of our plan, including strategy for financing, governance, pensions and energy and carbon management. The whole Board has considered reports on progress at each meeting and has dedicated special meetings to consideration of strategic aspects of our plan.

Our assurance process is designed to ensure that our Business Plan accords with Ofwat's methodology and the requirements of our stakeholders and customers. The Board has held the management team to account and challenged and tested the proposals within our plan. We have tested our submission against the criteria Ofwat will use for their Initial Assessment of Plans and consider that it meets the criteria for a high quality, innovative and deliverable plan. We have used internal reviews and appropriately qualified independent third-party assurance providers to test the reasonableness and reliability of our plans.

Historic performance data and forecasts have been assembled under well-established procedures used to compile our annual performance reports. Data is collated and checked by senior managers, and all tables and commentaries are owned and reviewed by the relevant executive director. The same approach has been adopted for forecasts. The Company is ISO9001 accredited and the Company's systems and procedures are regularly checked and audited by internal and external auditors.

Assurance statements

The Board confirms that:

- We consider that all the elements of our PR19 Business Plan submission add up to a high quality plan that is deliverable with the resources proposed
- We have challenged management on a regular basis, and using our knowledge of past performance and future plans, have satisfied ourselves that plans are stretching but realistic
- We are satisfied that our plan will deliver operational, financial and corporate resilience to at least 2030
- Our plan will deliver outcomes that are consistent with our legal obligations, the Government's strategic policy statements and regulatory guidance
- Our plan will underpin a continued level of trust and confidence from the communities we serve, through promoting transparency and engagement on issues that matter to them.

We confirm that, at its meeting on 20 August 2018, the full Board reviewed the Company's PR19 Business Plan and approved its submission to Ofwat. We consider that the plan in the round proposes a package that meets our customers' expectations and will be well received by them.

Signed by:

Jeremy Pelczer, Chairman

Murray Legg, Senior Independent Non-executive

Dave Shemmans, Independent Non-executive

Jon Woods, Independent Non-executive

Yoichi Sakai, Shareholder Nominated Non-executive

Ryuichi Nishida, Shareholder Nominated Non-executive

Anthony Ferrar, Managing Director

Paul Kerr, Finance and Regulation Director

John Chadwick, Regulation Director