Cambridge Water

South Staffs Water

South Staffordshire Water PLC

# Securing your water future

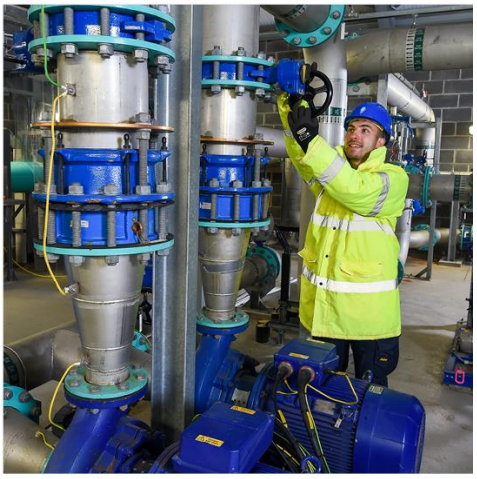
# Business plan 2025 to 2030

# About South Staffordshire Water PLC

We operate Cambridge Water and South Staffs Water


We are part of the South Staffordshire Plc group of companies

We are a water only company, and do not take away and treat waste water



We are regulated by Ofwat, the Environment Agency and the Drinking Water Inspectorate

We provide clean water to more than 1.7 million people and 43,000 businesses every day

We have been a successful, privately-run business for 170 years. We have never been in public ownership

# Our vision and purpose

## Our vision

To deliver clean, affordable water every day

## Our mission

To make sure:

- all our customers have access to high-quality and affordable drinking water every day; and
- we always empower our people to provide an excellent and trusted service.

## Our purpose

Over the past 170 years, we have provided high-quality water supplies to customers in our Cambridge and South Staffs regions. So that we can keep providing this essential public service, we:

- put customers' needs at the heart of all our decision making;
- actively work in partnership with local communities;
- act as the guardians of our assets, building resilience with regular investment;
- work hard to protect and enhance the natural environment; and
- run an efficient business, in everyone's interests.

This is how we are **securing the water future – for our customers, our communities, the environment and our people**.

## Our values

Our mission and purpose are underpinned by our values.

- Equality, diversity and inclusion
- Excellence in service
- Responsibility
- Trust and respect

These values are reflected in our people's objectives and the work they do.

# Structure of this business plan

While this plan is primarily aimed at our regulator Ofwat, we recognise that many people will have an interest in it. This includes our customers and other stakeholders, our people and our investors. So, we have structured this plan in a way that is easy to navigate and that will be meaningful to all readers.

## Part 1: Overview of our business plan

**The main features of our plan, written primarily with a general audience in mind, but with some key considerations for Ofwat.**



## Part 2: Setting the context for our business plan

**An introduction to South Staffordshire Water, including a summary of our performance during the first three years of the current planning period (2020 to 2025) and a summary of our plans for 2025 to 2030.**



## Part 3: Meeting our regulatory requirements

**The detail that underpins our plan, following Ofwat's quality and ambition assessment methodology.**



## Part 4: Looking to AMP9 and beyond

**A brief forward look to our plans for the five years from 2030 to 2035.**



## Part 5: Assurance of our plan

**A statement from the South Staffordshire Water Board on how it has assured itself that our plan is high-quality and meets Ofwat's assurance gateways.**



## Part 6: Other information








# Part 1:
# Overview of our business plan

# Joint welcome from our Chair and Managing Director

## Welcome to our five-year strategic roadmap for 2025 to 2030, a comprehensive guide to how we intend to deliver essential services to our valued customers while maintaining a steadfast commitment to environmental preservation and enhancement. This plan also encompasses our strategies to maintain the affordability of water and extend support to all customers who need additional assistance.

As a locally focused drinking water company, our primary objective is to delivery high quality services to our customers at a price they are willing to pay for, while also leaving a better environmental condition for future generations.

We have successfully delivered on the above throughout AMP7 and improved our performance to become an upper quartile business for service delivery and efficiency. We have achieved such with the backdrop of the global pandemic, volatile energy markets, a criminal cyber-attack on our business and a changing climate which has required an increased focus on resilience. Throughout, our investors have supported and have contributed with a £25 million equity injection into our business during the current planning period.

The backdrop to our plan is the ongoing conflict in Ukraine, which resulted in a spike in energy costs in late 2022, subsequently leading to a cost-of-living crisis. Concurrently, the England and Wales water sector has faced heightened public and political scrutiny, with increasing calls for water companies to be nationalised against negative media narratives about pollution, executive compensation and dividends. Given these circumstances, it's imperative that we demonstrate unwavering responsibility towards our customers and the environment.

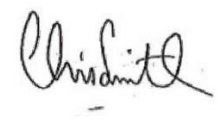
These macro conditions have also had direct impacts on our business. Over the past two years we've faced large increases in the costs of many of the consumables that are essential for our business – not least the chemicals we use to treat the water we supply to customers and the power we need to run our operations. This has resulted in us making challenging cost choices for the business that we have not passed on to our customers.

Coupled with this, we recognise the need for us to remain financially resilient over the long term. As one of the smaller companies in the England and Wales water sector, it is more difficult for us to access the debt market at the same rate as the larger water and sewerage companies. So, we consider an adjustment on our cost of capital necessary to ensure our

future financial stability. We have the support of our customers for this adjustment. But we also have the support of our long-term investors who are considering an equity injection of £35 million into the business, so that they take some of the financial burden from our customers.

In addition, we're still seeing high demand for water across our Cambridge and South Staffs regions, which has not returned to pre-pandemic levels. We've been exploring the reasons for this and have been proactively looking at ways to change our customers' behaviour and encourage them to place more value on the water they use. We think our regulator Ofwat also has a part to play here in acknowledging the impact the COVID-19 pandemic has had on how water shapes the daily lives of people and society – and that this should be reflected in future target setting.

Our strategy is designed with an overarching theme of securing a sustainable water future for customers, communities and the environment. We also aim to enhance society's understanding of how it values water as a finite resource – a matter the Board and we hold dear. As a locally focused utility, serving our Cambridge and South Staffs regions for 170 years, we maintain a long-term perspective, with the agility to swiftly adapt to evolving circumstances. We welcome that, with this review of our price controls, Ofwat is also taking a long-term view of the services customers want and the environmental enhancements required – and the associated investment needed to deliver all this.

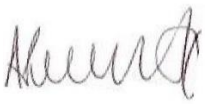


Lord Smith of Finsbury

Our plan is ambitious, building on past decisions and laying the groundwork for future strategic periods. It emphasises proactive and responsive customer services, investment in sector-leading assets, activities to protect the environment and long-term financial sustainability, all while delivering maximum societal value. Our plan is moulded by extensive, transparent engagement with customers and stakeholders. It is also supported by our shareholders, who are committed to taking a long-term view of their investment in our business.

We're confident that our strategy will enable us to overcome long-term challenges, such as rising customer expectations, climate change, environmental protection and population growth. We think it will have a positive impact on our local communities and ensure local and environmental considerations always inform our decision-making processes. We also expect it to foster a culture of innovation within our everyday operations, which is essential for delivering the improvements our customers expect and are willing to fund.

Finally, our strategic vision would be incomplete without our dedicated team. We are committed to running an efficient, sustainable business where our people are empowered to make decisions and where they possess the skills necessary to realise our long-term goals. Each member of our team, whether in the field, our offices or our contact centre, plays a crucial role in bringing this plan to life. Their dedication and hard work are integral to securing a sustainable water future for all of us.



Andy Willicott

# Our plan at a glance

**Our plan for the five years from 2025 to 2030** is about securing the water future for customers, communities and the environment. This means delivering the services our customers want and are willing to pay for. It also means leaving the environment in a better state for future generations.

**£819 million** – the total value of our plan

**£218** – the typical bill customers will pay by 2030

Invest **£40 million** to ensure excellent water quality and reliable assets

Sector-leading package of **performance commitment targets**

Invest **£19 million** to enhance and protect the environment

Achieve **76% metering** coverage by 2030

Deliver our **net zero** ambitions

Develop alternative water sources, including **a new reservoir** in our Cambridge region

Deliver ambitious leakage reductions – **20%** in our Cambridge region and **15%** in our South Staffs region

Provide financial support to **60,000 customers** a year

Roll out an innovative **essential use tariff**

Reach **35,000 pupils** with our education outreach programme

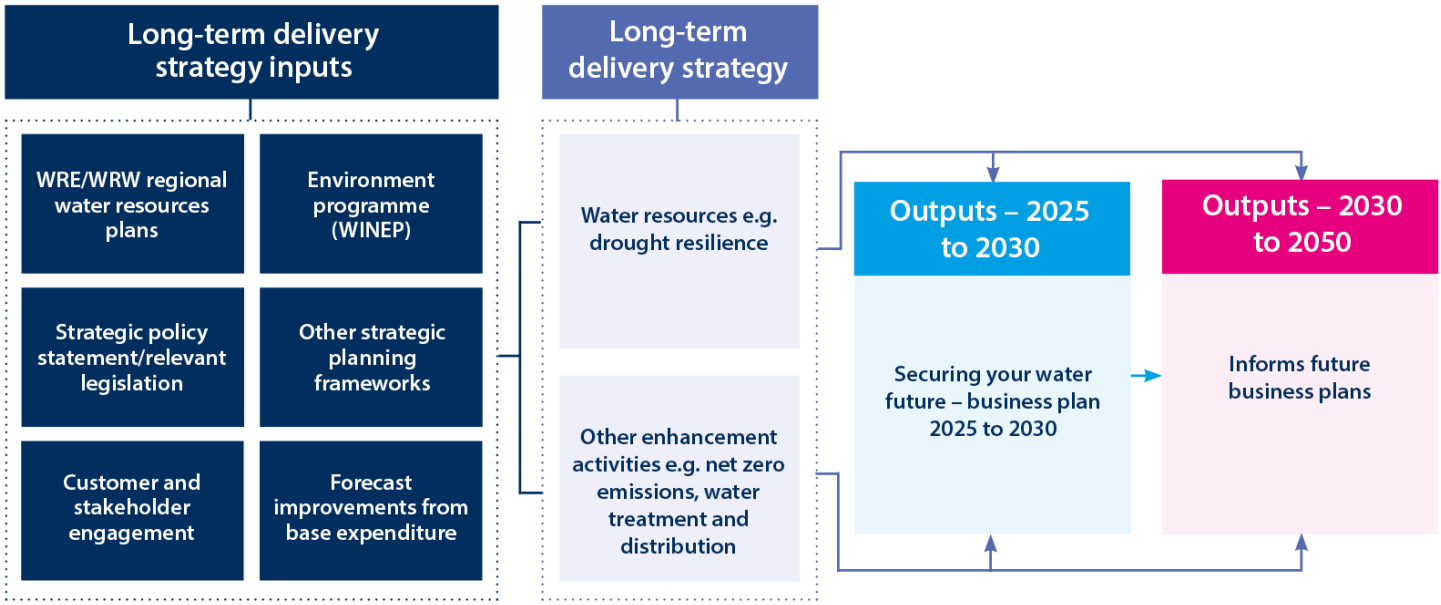
**Increase community support** for customers who need the most help

Launch a **water efficiency scheme** for non-household customers

Community hub

Introduce a **'Help when you need it'** scheme for customers in vulnerable circumstances

# How our plan aligns with other plans



# Executive summary

## South Staffordshire Water is a successful water only company. We have provided an essential service to customers across our Cambridge and South Staffs regions since 1853, when we were founded in the interests of public welfare to supply clean water. Our small size and strong local focus mean we remain embedded at the heart of the communities we serve.

As a long-term business, we always plan for the future. This means we can adapt quickly to changing circumstances. We have set our business plan for 2025 to 2030 within this long-term view – and in a way that represents best value. This is how we will secure the water future for our customers, our communities and the environment.

We always strive to deliver the services that are important to our customers. This includes protecting and enhancing the environment we all rely on and enjoy. We work hard to understand our customers' needs, using a wide range of tailored engagement approaches and tracking shifts in their priorities over time. Looking ahead, we want to be a sustainable business that always delivers value for money for our customers – and long-term value for society and the environment. Key to this is making sure we spend our customers' money wisely. We want to generate positive impacts for local communities and work in partnership with others to ensure we leave the environment in a better state for future generations. We also want to make sure social and environmental factors are at the heart of all our decision-making.

And we want to demonstrate our leadership within the sector. In our Cambridge region, for example, we are playing an active role to encourage society to think differently about its relationship with water; this means collaborating proactively with stakeholders to resolve the water supply challenges currently facing the east of England.

### Delivering our high-quality and ambitious plan – key considerations for Ofwat

We welcome the approach our regulator Ofwat has taken with this review of our price controls by setting it in a long-term context. As a company with a long history of planning for the future and delivering services efficiently, we think this approach will help to give certainty to our customers over the services they will receive from us and the bills they will pay. It also delivers certainty for our investors, who have demonstrated their commitment to our business by considering an equity injection of £35 million to ensure our long-term financial resilience and also to take some of the financial burden away from our customers. We remain committed to the regulatory framework and have produced a business plan that is consistent with Ofwat's PR24 methodology and additional guidance. But there are a number of critical areas, specific to our business, that we need Ofwat to consider to ensure we can continue to deliver the services our customers expect and pay for, now and in the future. These are highlighted below and discussed in more detail elsewhere in our plan.

1. **Power costs.** Power costs make up around 18% of our base total expenditure (totex) and despite our extensive efforts to reduce our energy demand (e.g. through the installation of energy efficient pumps), the challenges associated with our average pumping head costs means we will always be an outlier in terms of consumption. It is critical we are funded appropriately for power, to avoid these essential costs crowding out investment and maintenance in our base expenditure. This means both our energy use requirements and the power market prices must be reflected in our allowances as set out in SSC19 'Base cost assessment factors including real price effects and topography claim update'. As the cost models are based only on historic data, they do not reflect the material step change in market prices that we have been subject to. We propose using the Real Price Effects mechanism to adjust for this change outside of Ofwat's modelling. We also have the highest average pumping head costs in the water sector, primarily because of the physical topography in our South Staffs region and the location of dense population areas in and around the Black Country. This increased energy use is unavoidable and as it is not captured appropriately by Ofwat's models, we have submitted a separate cost adjustment claim for topography.
2. **Per capita consumption penalty.** The COVID-19 pandemic led to an increase in household water use as customers spent more time at home. Changing work patterns, with more home working, has sustained this high demand. So, we are forecasting a £13 million penalty position by the end of the current planning period as a result of these unforeseen circumstances. We propose that Ofwat differentiates between increased consumption within and outside of management control, as set out in SSC18 'Our approach to PCC targets and the impact of the COVID-19 pandemic', and concludes a penalty of £0.6 million suitably reflects our degree of delivery responsibility. We make a case for our South Staffs region being different to the rest of the water sector in that the hybrid working conditions that are now the norm have replaced people travelling out of the area of supply to go to work. This means that consumption that was once in Severn Trent Water's regions is now in ours. We have proved this by analysing changes in commuter patterns. Also, to ensure we set achievable but stretching targets for 2025 to 2030, we propose to re-base our target start position, while ensuring we deliver the equivalent demand reductions set out in our Cambridge and South Staffs water resources management plans (WRMPs) and meet the statutory long-term per capita consumption (PCC) targets set out in the Environment Act.
3. **Financeability and the cost of capital.** As a small water only company, our cost of embedded debt is higher than that for the larger water and sewerage companies. Ofwat has recognised this by excluding us from its assessment of the industry cost of debt. We have therefore provided compelling evidence for a company-specific adjustment of 55 basis points on the embedded cost of debt, for which we have customer support (see chapter 7). We have also updated Ofwat's early view of the weighted average cost of capital (WACC) to reflect the latest market data, but while following the same methodology.

4. **Outcome delivery incentives and the skew to penalty.** We have used Ofwat's proposed outcome delivery incentive (ODI) rates in this business plan as required. But we have proposed stretching performance commitments, making outperformance challenging. Many of these are subject to high volatility because of factors outside of our control, such as the weather. So, the symmetric reward and penalty rates and the larger number of penalty-only performance commitments, create a significant negative skew on the ODI package. We have proposed several options for mitigation measures to balance the package, including continuing with penalty collars and deadbands where appropriate. However, as there are Ofwat ODI rates still to be derived for biodiversity and greenhouse gas emissions, and as Ofwat will evaluate the aspirations we have proposed for our performance commitments against the water sector's ambition to derive many common commitment targets, this means many uncertainties remain on the true scale of the ODI risk range for PR24. See SSC20 'Outcome delivery incentives risk range' for more detail about these issues.
5. **Fens reservoir.** In partnership with Anglian Water, we have been developing a strategic resource option – the Fens reservoir – and have taken it through the RAPID process during this planning period. Having considered many options, we are confident this is the best solution to meet the growth in demand expected in our Cambridge region and the levels of abstraction reduction required to protect and enhance the chalk aquifers from where we take our water to supply to customers. As a small water company, this solution poses many challenges because of the significant costs associated with a project of this scale. At this stage, we do not have enough cost confidence to include the development costs within this core business plan submission because of the complexity of the scheme. In addition, as we will be taking 50% of the total yield of the reservoir, the development costs are, proportionately, even more material for than for Anglian Water. And we do not consider the current regulatory approach works for a company of our size to bring a strategic resource to fruition, and we have been in active dialogue with all of our regulators about this. It is for this reason we have not included the expenditure needed for the Fens reservoir in our core plan, but have included it instead as an appendix to this business plan (see SSC03 'Fens reservoir – our approach into AMP8'). We hope to resolve this matter with Ofwat in the coming months.

## Facing future challenges

We are committed to delivering the best business plan for our customers, the environment and our business. This means continuing to invest in sector-leading assets to enable us to always deliver high-quality water and excellent services to customers now and in the future. But we are facing a number of significant challenges that mean it is more important than ever for us to adopt a long-term planning strategy that can adapt to changing circumstances. These include:

- an **increased demand for water**, because of population growth across our Cambridge and South Staffs regions;
- **changing rainfall patterns**, with the impact of climate change leading to a higher risk of flooding or longer periods of drought;
- the need to further **reduce leakage** on our network of pipes across both regions;
- the need to **reduce carbon and other greenhouse gas emissions** to help combat the impact of global warming;
- the need to **encourage more water efficiency** to help customers value the water they use;
- the need to **protect the water environment**, including the rare chalk stream habitats in our Cambridge region; and
- **making sure our services are accessible** to all customers and that help is available to all those who need it.

At the same time, we have to make sure the bills our customers pay remain affordable, and that we continue to ensure the long-term reliability of our water services.

This plan describes how we will meet these challenges.

## Delivering our long-term ambitions

We have an ambitious, long-term vision for our business that aims to demonstrate our value to customers, our communities and to wider society. It also aims to demonstrate our commitment to protecting and enhancing the environment. We summarised our long-term vision in 'Looking to the future', published in November 2021, and have published our full long-term delivery strategy (LTDS) alongside this plan. To help us articulate our vision and set it in context, we have developed the following ambition statements, which our people and the Board have helped to shape.

- **Our service.** We will use cutting edge technology and ensure the infrastructure is in place so that customers always receive resilient, high-quality water supplies.
- **Our environment.** We will lead in protecting and enhancing the environment – working with partners to ensure sustainable water supplies and flourishing local habitats.
- **Our customers.** We will innovate to exceed customers' expectations of our service, end water poverty and make sure help is always available.
- **Our communities.** We will use partnerships and education to lift our communities, creating space and opportunities to help people work and thrive.
- **Our business.** We will lead in adapting to climate change and will run a safe, efficient and sustainable business, with a highly skilled workforce.

As the current custodians of this plan, we have a responsibility to deliver continual improvements to help us achieve our long-term goals.

## Highlights of our plan

This plan builds on our previous five-year business plans and lays the foundation for future planning periods. This long-term thinking is central to all our decision-making. Over the five years covered by this plan, we will invest and spend around £819 million on services that exceed customers' expectations and

infrastructure that is resilient to a changing climate and a growing population. At the same time, we will continue to enhance and protect the environment, making sure we leave it in a better state for future generations.

## Providing high-quality, resilient services

Since we published our last business plan, we have taken some significant steps in our approach to asset management. These changes have covered everything from improving the quality of our data to re-structuring our asset management team, as well as implementing new tools and technologies. The aim is to better establish good asset management practices across the business over the long term. We have also prioritised maturity improvements that have enabled us to deliver the best possible business plan for customers, stakeholders and the environment. This includes implementing a new risk and value framework and developing new internal models for things like mains bursts and determining storage levels within all our water supply zones.

Using this proactive and intelligence-led approach, we have developed our most detailed business plan using a bottom-up and top-down approach. This brings together data and information about our asset health and performance with predictive models and future scenarios, all aligned with Ofwat's common reference scenarios for water companies' long-term delivery strategies. The process we have followed has been assured by an independent third party and we are confident that this has helped us to develop a best value plan.

During AMP8 we will invest £150 million net capital expenditure to maintain our assets for long term. This includes investment in our non-infrastructure assets. We will also invest £84 million net on mains rehabilitation and other schemes. And we will invest £140 million net capital expenditure to enhance our assets under five work programmes that focus on delivering high-quality water and resilience over AMP8 and beyond

Over the life of this plan, we will do the following.

- Deliver high water quality. We will continue with our borehole maintenance programme and will invest in a proactive maintenance programme for our pumping and treatment assets. In addition, we will invest in two strategic service reservoir assets at Barr Beacon and Langley in our South Staffs region. This is essential to ensure sure the service we provide to customers remains resilient to the long-term challenges we face. We will also carry out remedial work on specific assets where the inspections we have already carried out have identified risks that require mitigation between 2025 and 2030. And we will deliver a number of schemes that will enable us to improve water quality at some of the sites across our Cambridge and South Staffs regions. This includes installing ultraviolet (UV) treatment processes at some of our pumping stations.

- Using cutting edge technology. We will consider the range of technologies and approaches available to us to mitigate the risks of customers having no water for any length of time. This includes investing in site automation technology to help future proof our operations. In addition, we will make our systems more resilient to the threat of criminal cyber-attacks. And we will seek to implement a 'smart' water network by 2035, which will improve the efficiency, longevity and reliability of our assets by better measuring, analysing and acting upon a wide range of events that can affect the performance of our network. Alongside this, we will carry out a network calming trial to help us deliver benefits for customers in terms of fewer mains failures and supply interruptions.

### How we are securing your water future...

"We're immensely proud to provide clean, safe water to nearly two million customers across our Cambridge and South Staffs regions. We're acutely aware of the inconvenience and distress that having no tap water causes households and businesses within the communities we supply. So, we're setting ourselves even more challenging targets to reduce the occasions that customers see an interruption to their water supply" – Andrew Lobley, Operations Director

- Maintaining resilient assets. The focus of our investment in this area is on renewing our network of water mains to manage the long-term serviceability of our network. In the five years to 2030 we will renew 254 km of our mains networks across our Cambridge and South Staffs regions. We will also continue with our main diversion schemes – most notably, for the HS2 high-speed rail link, which runs through our South Staffs region. And we will deliver three schemes in our South Staffs region that will help to deliver more water storage capacity and more resilience to address the risks posed by single points of failure within our water storage and distribution system.

- Dealing with lead pipes on our network. We will continue to proactively replace lead pipework as part of our mains rehabilitation programme and in response to elevated level levels at customers' properties. In addition, we will carry out a programme of work to replace 'mains to tap' connections at the 373 primaries schools and nurseries in our Cambridge and South Staffs regions that we know to have lead pipes. And we will carry out a pilot trial to inform our lead strategy by laying dedicated new supplies in a representative area of around 1,500 properties – and sharing the learning from this with the rest of the water sector.

## Protecting and enhancing the environment

We are committed to protecting and enhancing the environment for the benefit of current and future customers. This means managing the water we take ('abstract') from the environment in a sustainable way, helping customers to manage their own water use and improving the biodiversity of our local

habitats. It also means keeping more water in the environment by reducing leakage from the network of pipes across our Cambridge and South Staffs regions.

Over the life of this plan we will do the following.

- Deliver ambitious leakage reductions. We will reduce leakage by at least 20% in our Cambridge region and 15% in our South Staffs region, going beyond the needs of our WRMPs. We will also target leakage on customers' supply pipes, which accounts for around 30% of all leakage on our network. This includes offering an assisted leak repair service and helping to fix leaks wherever we can.

- Develop alternative water sources. Our Cambridge region is in one of the driest parts of the country, with demand growth forecast to be higher than anywhere else in the UK. This means there are significant challenges that could affect how much water we have available to meet demand. We have identified two alternative water supply options to address these challenges. The first is a transfer of water from Anglian Water's Grafham reservoir, which will potentially deliver 26 million litres of water a day into our Cambridge region. We will invest £12.4 million to deliver this option. We are also working in partnership with Anglian Water to build a new reservoir in the Cambridgeshire Fens. This will deliver around 44 million litres of water a day into our Cambridge region from the late 2030s. When complete, the total cost of this scheme is likely to be around £1.96 billion. We are still working with our regulators on the right framework to deliver this.

- Encourage customers to be more water efficient. We will invest more than £13.02 million to encourage customers to use water wisely. This includes delivering a household water efficiency programme using a combination of home visits and partnership working – for example, with local housing associations. In addition, we will trial an essential use tariff for customers on low to middle incomes, but who do not qualify for our Assure social tariff. And we will deliver a water efficiency programme specifically tailored for our non-household customers.

- Launch a universal metering programme. We will build on our current proactive approach to manage demand by installing 31,000 water meters a year to take metering levels across our Cambridge and South Staffs regions from 53% currently to around 76% by 2030. Our aim is to get as close as possible to 100% metered properties by 2035. Key to the success of this initiative is making sure we put plans in place to help customers through the transition from unmeasured to metered charges.

- Deliver our national environment programme (WINEP) obligations. We will invest £19 million to deliver our environmental obligations. This includes implementing river enhancement and restoration projects for seven chalk streams in our Cambridge region. In addition, we will install special screens at the water intake pipes at Chelmarsh reservoir near our Hampton Loade water treatment works to stop eels and young fish from becoming trapped in the reservoir. And we will work in partnership with other water companies to develop a surveillance programme to reduce the risk posed by the spread of invasive non-native species, which can harm our native British habitats.

- Deliver biodiversity improvements. We will continue to make grants available to local communities and organisations through our successful PEBBLE biodiversity improvement fund, and to farmers and landowners through our SPRING catchment management scheme. The aim is to deliver sustainable nature-based solutions and environmental benefits across our Cambridge and South Staffs regions at both a local and a catchment level.

## Exceeding our customers' expectations

We want to make sure we always provide our customers with tailored and seamless services. This includes giving them more flexibility and control in how they engage with us. At the same time, we want to be sure the bills our customers pay are affordable. And we want to continue offering the right levels of support for customers who are struggling to pay their bills or who are in circumstances that may make them vulnerable.

Over the life of this plan we will do the following.

- Keep water bills affordable. The ongoing cost-of-living crisis means it is more important than ever to keep our bills affordable and help those customers who need additional help. We will continue to offer our Assure social tariff and other financial support packages. By 2030, we want around 60,000 customers a year to benefit from these services. We will also launch a 'pay what you can' online tool to give eligible customers the ability to reduce the amount they pay, indicating to us that they might need additional help or support.

- Provide support for customers in vulnerable circumstances. We will build on the support we already provide to customers through our Priority Services Register. This includes increasing communication with customers to make them aware of the support packages we offer. We will also partner with local and national charities to highlight other types of support that may be available. And we will make the process of applying for our Assure social tariff easier as part of a wider 'help when you need it' programme.

- Trial an innovative tariff for low and middle income households. We will trial an essential use discount for customers who are above the income threshold for our Assure social tariff, but who are still struggling to pay their water bills. The tariff will be based on the number of people living in a property and will offer discounts for essential water use, with standard charges applying for discretionary use above this. We will also support customers on the trial with additional water efficiency advice.

- Offer customers choice. Recognising that different customers want to engage with us in different ways, we will invest £3 million to increase our digital and self-service offerings. We will also continue to offer more traditional communication methods for those customers who prefer to engage with us in this way.

- Provide a proactive service for our developer services customers. We will make improvements in how we present our paperwork and information. In addition, we will implement automated status updates and digital self-serve capability for those customers who want to engage with us in this way. We will also continue to improve the contact points we have with our customers. And we will continue to build on our existing water fittings discount scheme, implementing a tiered approach to promoting reduced consumption on new developments.

- Provide a proactive service for our non-household retailer customers. We will build on our existing outreach strategy to enhance the service we provide to our retail customers, including around communications and water efficiency initiatives. We will also invest in more smart metering technology to provide better visibility of data. This will make it easier for us to target unread meters and identify leaks quickly.

## Being embedded at the heart of the communities we serve

We are committed to making sure help and support is available to those customers who need it, when they need it. We pioneered a sector-leading approach to community engagement in 2018 when we opened our community hub in one of the most structurally challenged parts of our South Staffs region. We also want to make sure we encourage the next generation of water champions through our education outreach programme.

Over the life of this plan we will do the following.

- Educate our customers. We are aspiring to reach out to 35,000 pupils across our Cambridge and South Staffs regions with our mobile education programme. We will create partnerships with schools across Key Stages 3, 4 and 5, and provide a range of mentoring and work experience opportunities for young people. We will also develop and implement an award scheme for local schools that recognises their achievements in delivering meaningful water efficiency actions.

- Be visible and accessible in our communities. We will increase our community presence, focusing on our mobile approach to engagement. This includes creating pop-up hubs that will operate across the South Staffs region, using data to identify the most appropriate locations. We will also offer home visits for customers who need more tailored advice and support. And we will target engagement with traditionally hard-to-reach communities, using insight from our innovative diversity-led water efficiency project to support this.

- Lead by example. We will encourage the right behaviours within our business, focusing on the benefits high-performing people can bring to their roles, to their business and to wider society. In addition, we will work with other companies across the South Staffordshire Plc Group to develop and implement a graduate programme, with rotations through specific pathways across the different businesses. And we will continue to engage – with our people, customers, stakeholders and communities – building meaningful, long-term relationships to enable us to deliver our ambitions.

## Running a sustainable, long-term business

As a business with a long history of delivering high-quality and reliable water supplies into our communities, we always want to be able to provide the services our customers expect and pay for. We also want to make sure we deliver wider environmental and societal goals, including around our carbon and other greenhouse gas emissions. And we want to make sure our people have the skills they need to deliver our long-term ambitions.

Over the life of this plan we will do the following.

- Deliver net zero carbon emissions. We will invest £7.2 million in ground-mounted photovoltaic electricity generating assets at key sites across our South Staffs region to help us reduce our scope 1 and 2 carbon emissions. Essentially, scope 1 emissions are those controlled directly by us, while scope 2 emissions arise as a result of activities that relate to our operations but that are not directly controlled by us – for example, emissions released from the energy we purchase. We will also continue to drive our net zero carbon ambitions through a combination of activities, including demand reductions, efficiency measures and corporate power purchase agreements (CPPAs).

- Run a safe, efficient and sustainable business. We will continue to use best practice lean and agile techniques from other sectors to drive efficiency across the business. We will also continue to invest in our information technology (IT) and operational technology (OT) infrastructure, delivering systems that are resilient to future technological changes and to the threat posed by criminal cyber-attacks.

- Enable a skilled workforce. We will focus on succession planning and talent management. This includes identifying critical roles and skills gaps, and managing the risks around single points of failure within particular parts of the business. We will also identify appropriate development and training needs; and develop our approaches to recognition and reward and our onboarding processes. This is to ensure we always support our people to deliver their best for the business.

# Testing our plan with customers and stakeholders

A key feature of the process for developing our plan for 2025 to 2030 has been our comprehensive programme of engagement with our customers and stakeholders. This is to ensure all our decisions are grounded in their views and priorities. We began planning our engagement programme in 2020, setting ourselves the objective of achieving an even higher bar than we did when we developed our business plan for 2020 to 2025.

We have also expanded our use of engagement techniques, especially in the use of in-depth deliberative and ongoing studies, to deliver the high-quality insights that are at the heart of all our decision-making. And while our focus has been on ensuring the quality and effective use of insights as required by our regulator Ofwat, we have also expanded our engagement reach since 2020. In developing this plan, we have engaged with more than 92,500 customers and stakeholders across our strategic research and ongoing business-as-usual insight programmes.

We started by reviewing the effectiveness of the engagement we carried out when developing our last business plan. This included:

- evaluating changes in the wider landscape;
- assessing potential new approaches;
- taking a more robust approach to tracking customers' priorities;
- developing our guiding principles for engagement; and
- developing our customer research journey for the five years from 2025 to 2030.

Our engagement has covered the full range of household, non-household and future customers, community organisations, customer advocates and regulatory bodies. It has been characterised by the wide range of techniques we have used, including:

- short and in-depth phone interviews and surveys;
- online surveys;
- deliberative online research panels, Citizens' Juries and the H2Online communities in our Cambridge and South Staffs regions;
- deliberative focus groups;
- co-development sessions;
- roundtable meetings and stakeholder forums; and
- business-as-usual events and community activities.

At the heart of our engagement journey has sat an approach to triangulating all the insights we have gained. In developing this approach, we have used the best practice framework devised by CCW, the customer watchdog, in association with SIA Partners, a global management consulting business.

We have also embedded a new approach to collaborating with our research and insight supply chain. We have been helped by having a strong group of research partners with expertise from within and outside the water sector. This has enabled us to bring new learnings into our engagement.

And we have adopted a principles-based approach to engaging with our stakeholders, using that insight to inform our decision-making. All our engagement has been challenged and assured by the independent Stakeholder Challenge Panel.

# What this will mean for customers' bills

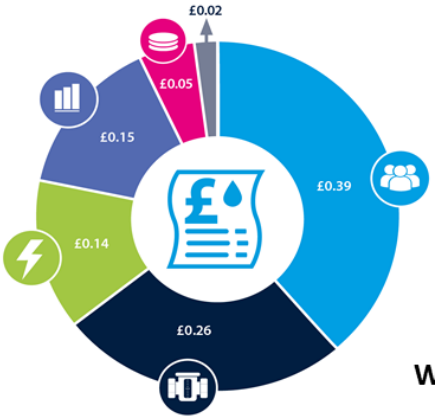
Our typical annual bill today (2023) **£170**

+ c£25 of inflation

+ c£7 of higher than inflation energy prices increases

+ c£16 to supply the water we need in the long term

Potential typical annual bill by 2030 **£218**




## Potential bill impact by 2030

Breakdown of where every £1 goes

- Opex (people costs, materials and contractors)
- Investing in our assets
- Energy costs
- Financing costs, rates and other taxes
- Return to shareholders
- Performance incentives

**We cover the clean water services only**

Total typical bill still less than **£20 a month** per household by 2030

## Securing your water future – valuing water as a precious resource

Cape Town, South Africa, 2018. After a sustained period of drought, the city faced the very real prospect of its reservoirs running dry. In response, the authorities introduced the concept of 'Day Zero' – the day when water supplies to residents would be switched off, requiring them to collect a daily water ration of 25 litres per person[1] from distribution points around the city.

But how did the authorities find themselves in this situation and what did they do to resolve it? The key driver was a drought described as a once in a millennium event[2], with sustained periods of rainfall far below expected levels over the previous three years. At the same time, the city's council had failed to adapt the water supply system to the demands of a growing urban population.

The idea behind Day Zero was to focus people's attention on managing water supplies as tightly as possible – getting them to value it more in the process. The goal was to achieve average daily demand of less than 450 million litres – the equivalent of 50 litres of water per person. To put this in context, this is the typical volume of water used when flushing a toilet ten times a day[3].

The authorities used a combination of information campaigns, mandatory water saving devices for high-use households, fines and punitive tariffs to drive down water demand across the city. They also provided weekly updates and used an open platform to show the households that used the most – or the least – water. This level of transparency was vital to ensure buy in from all the city's residents.

The authorities' demand management measures had the desired effect – awareness about individual water use among the city's population increased and Day Zero was avoided. And although heavy rainfall in 2020 started filling the city's reservoirs again, there had been a fundamental shift in people's relationship with water, with more of them retaining the water saving habits they had been encouraged to adopt in the previous two years.

So what does this have to do with us? We live in a society where water is always available – we turn on the tap and it is always there; we use it in our homes, our businesses, our communities and our religious observances; we water our gardens and irrigate our crops with it; and we see it in our lakes, rivers and reservoirs every day. It is fundamental to every aspect of our lives.

And yet, in the UK, ten of the warmest years on record have occurred in the past two decades[4]. 2022 was particularly notable for the large-scale drought across the UK, with large parts of England and Wales experiencing lower than average rainfall throughout much of the spring and summer. Indeed, England experienced the driest July since 1935[5], which, coupled with higher-than-average temperatures, meant high demand from consumers and less water available in the environment for public supply.

Climate change data suggests we will experience such extremes of weather more frequently in the future. This means considering different ways to encourage fundamental shifts in consumers' relationship with water to deliver meaningful and lasting societal and behavioural change. Key to this is our focus on long-term, holistic solutions for water supplies in our Cambridge and South Staffs regions that consider the needs of all water users, while making sure we keep bills our customers pay fair and affordable, now and in the future.

Also important is the need for us to develop and encourage the water champions of the future, who can help us spread messages about the need to use water wisely. In the current five-year planning period to 2025, we have an ambitious target to carry out meaningful engagement with 6,000 young people a year across our Cambridge and South Staffs regions. We use a combination of workshops, assemblies and online resources to encourage young people to value water as a precious and finite resource. This is something we will continue to develop, expanding the coverage of our education outreach programme and the range of engagement options available. We also have Young Innovators' Panels across both regions: in summer 2023, the Panel in our South Staffs region was tasked with developing water efficiency workshop ideas for Key Stage 3 pupils to raise awareness and knowledge of the value of water that we can take forward in our business and put into practice, for the benefit of all our customers.

The overarching theme of this business plan is about securing the water future for our customers, our communities and the environment. This means using awareness-raising campaigns to encourage everyone to understand more about the impact human activity has on our water resources. It also means making sure we make the right investments in our assets and network in the right way and at the right time – having a long term, best value approach to planning helps us do this effectively and efficiently.

We never want to see a 'Day Zero' here in the UK. So taking steps to encourage everyone to value water more, will help to ensure this does not happen.

[1] 'Day Zero is meant to cut Cape Town's water use. What is it, and is it working?' Kevin Winter, Senior Lecturer in Environmental and Geographical Science, University of Cape Town. The Conversation, 20 February 2020.
[2] 'Day Zero: How Cape Town is running out of water'. Josh Holder and Niko Kommenda. The Guardian, 3 February 2018.
[3] Ibid.
[4] 'Top ten UK's hottest years all since 2022'. Met Office press release, 31 July 2019. Top ten UK's hottest years all since 2002 – Met Office.
5 'Driest July since 1935'. Met Office press release, 1 August 2022. Driest July in England since 1935 – Met Office.









# Part 2:
# Setting the context for our plan

# 1. Introduction

## At South Staffordshire Water, we have a long history of delivering clean water services to customers across our socially and geographically diverse Cambridge and South Staffs regions.

We are a successful, water only company that has provided an essential service to customers across our Cambridge and South Staffs regions since 1853, when we were founded in the interests of public welfare to supply clean water. Our small size and strong local focus mean we remain embedded at the heart of the communities we serve.

Our customers trust us to always do this in a way that is both efficient and that offers best value. Our small size relative to most of the other companies in the England and Wales water sector and our strong local focus means we are embedded at the heart of the communities we serve and we always strive to deliver the services that are important to our customers. This includes working hard to protect and enhance the environment we all rely on and enjoy.

Making sure we deliver our customers' priorities and preferences is central to everything we do. We use a wide range of tailored engagement approaches to help us understand their needs – including those of future customers, those who may find themselves in vulnerable circumstances or who have been traditionally hard to reach, and our non-household and business retail customers. We also engage regularly with a number of key stakeholders, including:

- customer advocacy groups, such as CCW, the consumer watchdog;
- environmental non-governmental organisations (NGOs);
- supply chain partners;
- local and national government officials and representatives; and
- sectoral regulators, including Ofwat, the Environment Agency and the Drinking Water Inspectorate (DWI).

We carefully evaluate all the insights we gain from our customers and stakeholders to help us make the best possible decisions and shape our plans.

As a long-term business, we are always planning for the future under a range of different scenarios. This enables us to adapt quickly to changing circumstances. We have set our business plan for the five years from 2025 to 2030 (AMP8) within this long-term context, ensuring we can always deliver the right investment in the right way, at the right time – and in a way that represents the best value. This is how we will secure the long-term water future for our customers, our communities and the environment.

We have traditionally been at the forefront of the water sector in terms of efficiency and delivering value for our customers. We want to make sure we always spend our customers' money wisely and see innovation as critical to enabling us to continue doing more for less, now and in the future. Key to this is creating a culture of innovation as an essential part of our business-as-usual activities, including sourcing funds from innovation competitions and other third parties. We consider this will help us to drive improvements in the services our customers have told us they want and are willing to pay for.

### How we are securing your water future...

"As a small water only company with a strong local focus, we always strive to deliver the best for our customers, the communities we serve and the environment. This is something we're all really passionate about" – Louise Bickley, Corporate Affairs Manager

Looking ahead, we want to be a sustainable, net zero carbon business that always delivers value for money for customers – and long-term value for society and the environment. This means generating positive impacts for local communities, while also working in partnership with others to ensure we leave the environment in a better state for future generations. And it means leading by example to ensure social and environmental factors are at the heart of all our decision-making.

We are committed to delivering the best business plan for our customers, the environment and our business. This means making sure we invest in sector-leading assets to enable us to continue delivering high-quality water and excellent service to customers, now and in the future. But we face several key challenges that mean it is more important than ever for us to adopt a more long-term adaptive planning strategy.

- Increased demand for water. By 2045, the population in our Cambridge region is forecast to increase by 32%, with 46,040 new homes expected to be built. Over the same time frame, the population in our South Staffs region is forecast to increase by 22%, with 125,000 new homes expected to be built. Our Cambridge region is also forecast to have the highest level of household and non-household growth anywhere in the UK to meet the Government's plans for the biotech and other new industries.

- **Changing rainfall patterns leading to a higher risk of flooding or longer periods of drought.** Climate change means we are likely to see more extremes of weather, with 60% less rainfall in the summer and 30% more rainfall in the winter in our Cambridge region by the 2080s. The equivalent numbers in our South Staffs region are 50% and 30%, respectively. In the UK, ten of the warmest years on record have occurred within the past two decades.

- **The need to further reduce leakage on our network.** Across our Cambridge region, around 15% of treated water is lost to leaks every day; the figure is around 20% in our South Staffs region, which is about the same as the national average. Around a third of all leakage comes from customers' supply pipes. It is important that we consider holistic solutions designed to tackle leakage in the round.

- **The need to reduce carbon and other greenhouse gas emissions.** To help combat the impact of global warming, we have committed to play our part to help the water sector in England and Wales achieve net zero operational carbon emissions by 2030.

- **The need to encourage more water efficiency.** This means using a combination of education and awareness-raising campaigns to inform customers about the need to use water wisely – and value it as a precious and finite resource. It also means encouraging more water recycling in homes and businesses across our Cambridge and South Staffs regions.

- **The need to protect the water environment.** Abstracting water from rivers and underground aquifers for public water supply could lead to a deterioration of the environment. This is particularly true for the rare chalk stream habitats that are a feature of our Cambridge region, which are impacted by a combination of pollution from agriculture, sewage and urban run-off, as well as abstraction and channel modification. We need to work with others in an integrated way to protect these fragile habitats now and in the future. This is because only 14% of rivers and water courses in England are currently classed by the Environment Agency as being in ecologically good condition – that is, healthy and able to recover if damaged.

- **Making sure our services are always accessible to all customers.** This means making sure help is available to all customers who need it, when they need it. And it means proactively providing a range of financial support and advice to those who are struggling to pay their water bills.

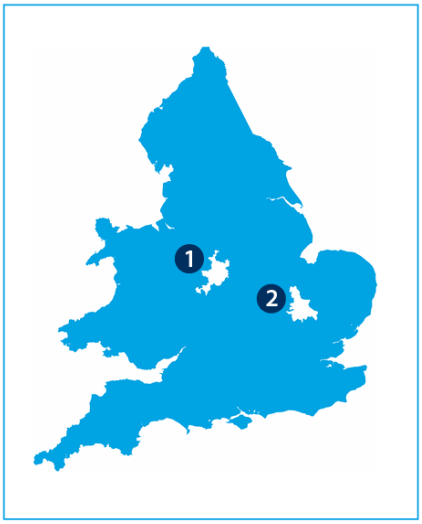
At the same time, we have to make sure the bills our customers pay remain affordable – and that we continue to ensure the long-term resilience of our water services to meet these challenges.

## 1.1 Who we are

**South Staffordshire Water operates across two regions under a single water supply licence. We provide clean water services to more than 1.7 million people and around 43,000 businesses in Cambridgeshire; and in parts of the West Midlands, South Staffordshire, South Derbyshire, North Warwickshire and North Worcestershire.**

Our Cambridge region covers an area of around 1,175km$^2$. It extends from Ramsey in the north to Melbourn in the south, and from Gamlingay in the west to the east of Cambridge city. Our South Staffs region covers an area of around 1,500m$^2$. It extends from Ashbourne in the north to Halesowen in the south, and from Kinver in the west to Burton-upon-Trent in the east.

| 1 South Staffs Water |
|---|
| Serves 1.4 million people across an area of 1,500 km$^2$ |
| Supplies around 570,000 homes and 34,000 business properties |
| 6,200 km of pipes |
| Supplies around 325 million litres of water a day |
| 2 surface water sources (River Severn & Blithfield reservoir) and 20 operational borehole sites |




| 2 Cambridge Water |
|---|
| Serves 350,000 people across an area of 1,175 km$^2$ |
| Supplies around 140,000 homes and 9,000 business properties |
| 2,500 km of pipes |
| Supplies around 85 million litres of water a day |
| Draws water from 23 operational borehole sites |

## 1.2 Our vision to 2050 – dealing with the challenges we face

**We have an ambitious, long-term vision for our business that aims to demonstrate our value to customers, our communities and to wider society. It also aims to demonstrate our commitment to protecting and enhancing the natural environment. To deliver this vision, we are focusing on the following priorities.**

- Meeting the needs of a growing population. This means developing new water sources such as the Fens reservoir with Anglian Water to supply customers in our Cambridge region. It also means making the most of our existing water sources and encouraging developers to install water recycling systems to help customers reduce how much they use in their homes and businesses.

- Adapting to a changing climate. This means encouraging sustainable practices within our business and our supply chain. It includes using renewable energy, having a fully electric vehicle fleet, and making sure our network of treatment works, pipes and pumping stations is resilient to extreme weather events.

- Protecting and enhancing the environment. This means abstracting less water from the environment to restore river flows. It also means working with farmers and landowners to improve water quality by minimising agricultural run-off. And it means creating or enhancing habitats that support a wide variety of plants and wildlife. Our ambition is to leave nature in a better state for future generations.

- Ending water poverty. This means keeping our customers' bills affordable and using smart data to proactively identify those who may be struggling to pay their bills. It also means offering the right levels of help and support for customers in the right way and at the right time.

- Remaining financeable over the long term. This means taking more advantage of green or sustainable financing initiatives, while continuing to always meet our legal, regulatory and financing obligations.

At the same time, we will need to consider the changing expectations of our customers, stakeholders, regulators and investors over time. This could mean us placing more emphasis on one priority over another at times, or it could mean adapting our activities to reflect a change in circumstances. Key to this remains the need for us to understand fully our customers' and stakeholders' needs and priorities, and to be embedded at the heart of all the communities we serve.

We discuss our long-term vision to 2050 in more detail in SSC02 'Looking to the future: South Staffordshire Water's long-term delivery strategy 2025 to 2050' (LTDS) published alongside this business plan. We have also produced a customer summary, called 'Looking to the future: our long-term vision to 2050', which is also available on our website.

## 1.3 Ofwat's ambitions for PR24

**As part of its overall approach to setting water companies' price controls, our regulator Ofwat has set out the following key ambitions for PR24 and beyond.**

- Focusing on the long term. This means delivering long-term outcomes, taking uncertainty and affordability constraints into account. It also means making sure our business plan and LTDS are closely aligned with our 25-year water resources management plans, and the Water Resources East (WRE) and Water Resources West (WRW) regional water resources plans. We are key members of both regional water resources planning groups.

- Delivering greater environmental and social value. This means making sustainable decisions that deliver value across a range of environmental and societal factors, including making more widespread use of nature-based solutions or working in partnership with others, both within and outside the water sector, to deliver meaningful solutions. In this way, we can demonstrate our value to society as the provider of an essential public service.

- Reflecting a clearer understanding of customers and communities. This means focusing more on day-to-day engagement with customers and other stakeholders and using that insight to drive decision-making across the business and shape our plans now and in the future. It also means helping customers to reduce their water consumption – making sure they see themselves as having a key role to play in delivering resilient and sustainable water services.

- Driving improvements through efficiency and innovation. This means looking at different ways to drive efficiency across the business. It includes working in partnership with other organisations and making more use of digitalisation, for example, to drive improvements in productivity.

These sector-wide ambitions are also reflected in our own long-term ambition statements (see below). Throughout this business plan, we explain how we have reflected Ofwat's ambitions for PR24 in all our decision-making and in the delivery of our own ambition statements.

## 1.4 Our long-term ambitions

**Our business plan for the five years from 2020 to 2025 focused on delivering five key outcomes for our customers, our communities, the services we deliver, the environment and our business. These outcomes reflect the areas where our customers said they want to hold us to account.**

We believe these overarching themes still apply to our long-term plans. So we have used them to develop the following ambition statements with our people and the Board, which sets the context for our vision for 2050


In chapter 3 we explain what each of these ambition statements means for customers, stakeholders and the environment – and how we plan to achieve them. As the custodians of this business plan and our long-term strategy, we have a responsibility to deliver continual improvements to help us achieve our goals and objectives.

## 1.5 Alignment with other plans

**Taking an integrated approach to long-term business planning means this plan is closely aligned with a number of others that we and other stakeholders produce, including the following.**

- UK Government 25-year environment plan. In 2018 the UK Government published its long-term plan for the environment. This sets out the actions the Government will take to help the natural world regain and retain good health, with a focus on: clean air; clean and plentiful water; thriving plants and wildlife; a reduced risk of harm from environmental hazards, such as flooding and drought; using natural resources more sustainably; and enhanced beauty, heritage and engagement with the natural environment. We have committed to play our part in delivering these objectives.

- National framework for water resources. This Environment Agency framework explores England's long-term water needs and sets out the scale of action needed to secure resilient water supplies are available to meet the needs of all water users in the future.

- WRE and WRW regional water resources plans. The aim of these plans, allowed for under the Environment Agency's national framework for water resources, is to develop a more detailed picture of the future water resource needs across England and some parts of Wales. As well as setting out the type and scale of the challenges to public water supplies as a result of climate change and population growth, the regional plans also consider the needs of other water users, such as agriculture and industry.

- Water resources management plans (WRMPs). We produce separate WRMPs for our Cambridge and South Staffs regions, reflecting their topographical and hydrological differences between the two supply areas. They each set out in detail how we will meet the predicted demand for water across both regions over the next 25 years and beyond. At the same time, these plans explore how we will also meet the needs of the environment over the long term – for example, through abstraction reductions – and ensure the delivery of Water Framework Directive (WFD) targets.

- Drought plans. We produce these operational plans, setting out our approach to managing water supplies in the event of a lengthy period of dry weather and a lack of

rainfall. They also set out what we will do before, during and after a drought to ensure we can continue to provide customers with secure water supplies while minimising any impact on the environment. Again, we produce separate drought plans for our Cambridge and South Staffs regions.

- River basin management plans. The Environment Agency produces these plans, which provide an overarching strategic framework for managing the water environment. They describe the challenges that threaten the water environment and how these challenges can be managed. They also inform decisions on land-use planning and include a range of measures to meet the overall objective of improving the environment.

- Flood risk management plans. These are strategic plans, again produced by the Environment Agency, that focus on areas where the risk of flooding has been identified as nationally significant – for example, in terms of impact should major flooding occur from surface water, rivers and the sea.

- Local authority development plans. These plans set out the vision for future development in individual local authority areas and consider projections for new housing needs. Every local authority in England and Wales should have an up-to-date local plan in place, produced in accordance with the National Planning Policy Framework. Each local plan should be updated at least every five years.

- Strategic environmental assessment and sustainability appraisal. The aim of this assessment and appraisal is to promote sustainable development by assessing the extent to which an emerging local plan will help to achieve relevant environmental, economic and social objectives, when judged against regional alternatives.

## 1.6 Having regard to Ofwat's public value principles

**In accordance with Ofwat's guidance on long-term delivery strategies, we have had regard to the regulator's final public value principles, published in March 2022.**

The aim is to ensure we take a more principles-based approach to delivering more social and environmental value as a way of better informing our decision-making. Below we set out each of Ofwat's public value principles and how we have reflected them in this business plan.

**Table 1 How Ofwat's public value principles are reflected in our business plan**

| Ofwat's public value principle | How we have had regard to the principle in our business plan |
|---|---|
| Companies should seek to create further social and environmental value in the course of delivering their core services, beyond the minimum required to meet statutory obligations. Social and environmental value may be created both in direct service provision and through the supply chain. | We want to be sector leading for leakage reduction by 2030. We are targeting reductions of 20% in our Cambridge region and 15% in our South Staffs region. As well as making use of tried and tested approaches to reduce leakage, we are also exploring new approaches, including looking at technology outside the water sector. And we are continuing with our proactive mains replacement programme, which will help to reduce leakage and keep more water in the environment. See section 3.2.1 on page 41.<br>We have stretching water industry national environment programme (WINEP) obligations to deliver, including a ten-year chalk stream restoration programme to improve brown trout habitats in seven water bodies in our Cambridge region. We are also continuing to deliver biodiversity improvements through our PEBBLE biodiversity fund and SPRING catchment management programme. See section 3.2.3 on page 46.<br>We have placed water affordability at the heart of our strategy. We already offer a range of support options for customers who are struggling to pay their water bills. We are going to give customers more choice in how they pay and take a proactive approach to identifying those customers who need additional help and support. This includes offering more proactive communications and partnering with third-party organisations to share information. And we are going to trial an innovative tariff for low/mid-income households above the threshold for our Assure social tariff, but who are still struggling to pay their water bills. See section 3.3.1 on page 48.<br>We are committed to increasing our community presence – focusing on a mobile approach in addition to our award-winning community hub. We are also adopting a 'wider than water' approach, using third-party insights to help us deliver more social benefit. This included developing an innovative faith-based water efficiency framework, for which we were awarded £270,000 from Ofwat's Innovation fund. See section 3.4.2 on page 62. |

| Ofwat's public value principle | How we have had regard to the principle in our business plan |
|---|---|
| Social and environmental benefits should be measurable, lasting and important to customers and communities. Mechanisms used to guide activity and drive decision-making should support this, for example through setting and using company purpose, wide external engagement and explicit consideration of non-financial benefits. | Our **purpose has been shaped by the Board and our people**. It puts our customers, our local communities and the environment at the heart of all our decision making. Our purpose is underpinned by our values of equality, excellence, responsibility and trust, which are reflected in our people's objectives and in the work they do. See page 2.<br>In developing this business plan, we **have engaged extensively with our customers about the services they expect us to deliver**, at a price they can afford to pay, using our strategic research and ongoing business-as-usual programmes. We **have also engaged more extensively with stakeholders than ever before**, using established principles to deliver the right engagement in the right way at the right time. In particular, we have worked hard to engage with environmental NGOs across both regions, but specifically in our Cambridge regions. And we have fed back to customers and stakeholders to show how their engagement is reflected in our decision-making. See chapter 4 on page 69.<br>Our **small size relative to other water companies in the water sector and strong local focus** means we have a good understanding of our customers and communities. |
| Companies should be open with information and insights on operational performance and impacts (both good and bad). This will support stakeholder engagement, facilitate collaboration and help identify opportunities for delivering additional social and environmental value. | We **are committed to being open and honest about our performance and our finances**, and use the annual regulatory reporting process to share information with customers and stakeholders. For this business plan, we have summarised our performance for the first three years of the current AMP, highlighting those areas where we have done well and those where we need to go further to improve our performance and meet our targets. This includes sharing information about the rewards we have received for outperformance or the penalties to which we have been subject to for failing to meet our targets. See chapter 2 on page 23. |
| Delivery of social and environmental value outcomes should not come at a greater cost to customers without customers' support. | As outlined above, in developing this business plan, we have engaged extensively with customers and stakeholders. We have also followed guidance from Ofwat and CCW to test the affordability and acceptability of our plans to 2030. The **research we have carried out is to give us confidence that most customers find our plans acceptable and affordable**. See chapter 5 on page 98. |
| Companies should consider where and how they can collaborate with others to optimise solutions and maximise benefits, seeking to align stakeholder interests where possible, and leveraging a fair share of third-party contributions where needed. Companies' public value activities should not displace other organisations who are better placed to act. | Over the past five years, we **have established meaningful relationships with more than 400 community organisations and local and national charities across our Cambridge and South Staffs regions**. In developing this business plan, we have engaged extensively with a wide range of third-party organisations. This is particularly true in our retail space, where we have collaborated with the likes of Citizens' Advice and debt support groups to act on our behalf in supporting customers who may be struggling to pay their water bills. We have also shared information with a foodbank in our South Staffs region to enable it to provide holistic support to share with customers on our behalf. We think that working with third-party organisations is going to help us co-created initiatives and ideas around supporting affordability throughout our communities. See section 3.3.1 on page 48. |
| Companies should take account of their capability, performance and circumstances in considering the scope for delivering greater social and environmental value. | Although we are one of the smaller companies in the water sector, we **do not think our size relative to that of other water companies constrains our ambitions**. In this business, we demonstrate some of the ways we want to lead by example and will strive to seek more opportunities to deliver greater social and environmental value. See section 3.4.3 on page 63. |

# 2. Delivering our business plan commitments for 2020 to 2025

As the provider of an essential public service, we recognise the importance of always delivering the things that matter most to our customers. This is essential if we are to retain their trust and confidence in us and the services we provide.

Over the five years from 2020 to 2025 (AMP7) we set ourselves the challenge of delivering our most ambitious investment programme – totalling around £600 million. Our plan focused on five outcomes: these are the promises we made to our customers on the services they want us to deliver over the current planning period. A suite of 29 performance commitments underpinned these outcomes, covering the areas where customers said they want to hold us to account. We worked with our customers to develop and set targets for each of these commitments to enable them to measure our performance.

A number of our performance commitments have financial incentives attached in the form of penalties for any targets we fail to meet and rewards for outperformance, which enable us to deliver a step change in customer service. Again, these are rooted strongly in our research findings, creating a direct link between what our customers told us they want and the incentive on us to deliver it. For our part, we made sure the incentives were appropriately balanced across the entire package of performance commitments, and that they fully reflected the social and environmental differences across our Cambridge and South Staffs regions.

Our performance to date continues to see us pushing the sector forward. We are consistently an upper quartile performing company for a number of measurements and in its 2022 service delivery report Ofwat classified us as a leading company in the water sector.

## 2.1 Delivering for our customers

**Our customers' views of the service we deliver are extremely important to us. So, we continually engage with them using a range of qualitative and quantitative tools, including focus groups, polls and surveys. We use the insight gained from this engagement to ensure we always deliver the things that are important to our customers and that they are willing to pay for.**

Our main regulatory customer service target is the customer measure of experience (C-MeX). This is a sector-wide commitment that is designed to ensure we always provide our household customers with excellent levels of service. C-MeX measures direct customer feedback. It comprises two surveys: one with customers who recently contacted us about the service they received from us; and one with randomly selected members of the public about their experience of us as their water company.

In both cases, customers are asked how satisfied they are with the service we provide and how likely they would be to recommend us to their friends or families. In the first year of the AMP7 planning period (2020/21), we were place 10th among the England and Wales water companies for our C-MeX performance. Knowing how important this measure is for our customers, we adopted a 'Customer First' strategy. This enabled us to deliver significantly improved performance in 2021/22, where we ended the year in 4th place in the sector overall. Unfortunately, we slipped back from our strong position in 2022/23. We think there are a number of drivers for this dip in performance, which have affected customers' confidence in us. Despite this setback, we remain committed to finishing AMP7 in an upper quartile position.

There is also a regulatory measure of customer experience for our developer services customers, called D-MeX. This customer group includes large and small property developers, self-lay providers and companies with new appointments and variations (NAVs) to operate in a specific geographic area within another water company's supply area. D-MeX comprises a survey of customers that recently completed a transaction with us and a measure of our performance against a set of service metrics developed by Water UK, the body that represents water companies. To date, we have made steady progress against this performance commitment, ending the 2022/23 reporting year in an above-average position. We have continued to build meaningful relationships with our developer services customers, sharing information and learnings. We have also made it easier for these customers to engage with us – for example, by making our Developer Services web pages more user friendly and easier to navigate.

And we have a bespoke customer service performance commitment that we call R-MeX. This measures business retailers' satisfaction in us as a wholesaler operating in a retail market. We use operating performance and market performance standards as the basis of R-MeX, combining them with our own retailer satisfaction survey. We have made some progress against this performance commitment, achieving an average score of 7.4 out of 10 in the market operator MOSL's output report published at the end of March 2023. This is the highest score we have received since we introduced our R-MeX measure in 2020 and it demonstrates our commitment to building effective relationships with our business retailer customers.

We are rightly proud of the Retail Market team's efforts to sustainably improve our performance. We also have an action plan in place to ensure improvements in service delivery are made consistently over the remaining two years of AMP7.

Underpinning our customer experience measures are our performance commitments to ensure we deliver services that represent value for money and that our customers have a high level of trust in us as the provider of an essential public service. We use the combined results of two surveys to derive the scores for these measures. Half the results come from an independent annual survey of more than 800 household customers; the other half come from CCW's Water Matters survey of 300 household customers. Both surveys include a representative sample of customers from across our Cambridge and South Staffs regions.

While we started the current planning period reasonably well – beating our target for customers' trust in 2020/21 and ending the year just under where we wanted to be in terms of value for money – we have since seen a deterioration in both performance commitments. We think there could be a variety of reasons for this, including the impact of the cost-of-living crisis and the negative reporting of the water sector in the media throughout 2022 and 2023. We will continue to use our quarterly priorities and promises trackers to monitor changes in customer sentiment and act to get these measures back on track by the end of the AMP.

As well as our regulatory performance commitments, we also made a number of other customer-related commitments in our business plan for 2020 to 2025. This included publishing our progress in meeting our performance commitment targets in an open and transparent way. We remain committed to sharing a wide range of information about our performance with customers and stakeholders. For example, we publish a customer-facing annual performance report each year – and through feedback from the H2Online customer communities in our Cambridge and South Staffs regions, we completely redesigned the latest version published in July 2023, making it much easier for customers to see how we have performed against our targets and offering them a range of opportunities to connect and engage with us.

Other commitments we have delivered so far during AMP7 include the following.

- Piloting tailored communications around bill formats and water efficiency campaigns to test customers' reaction and responsiveness.
- Developing an app to enable customers to check their account and report leaks more easily.
- Launching a 'text to pay' service, whereby we text eligible customers, prompting them to make a payment against their water bill.
- Introducing payment breaks of up to three months for customers who may need a short break from paying their water bills – for example, because of a significant temporary change in their financial circumstances.
- Achieving accreditation to the Institute of Customer Service's (ICS) ServiceMark.

But there are some areas where we have not delivered a specific business plan commitment. This might be because of a change in our approach or a policy, for example, or because on reflection we considered that the cost of carrying out the work outweighed the benefits it would ultimately deliver for customers. This includes expanding our existing activated assistant capability and implementing chatbot technology across a number of customer-facing processes. During the remainder of AMP7, we will continue to explore ways to deliver different customer-facing technologies efficiently and effectively.

### Initiatives delivered during AMP7

We have delivered a number of customer initiatives during the first three years of AMP7. These include the following.

- Creating a **Proactive Customer Operations Centre**. We have brought together our customer operations teams to ensure we exceed service level agreements and deliver excellent customer service.
- Launching **Aptumo, a new billing and customer relationship management system**. This has enabled us to make a step change from our inflexible legacy billing systems and bring all our billing and collection information together in one place, making it easier for us to manage and resolve customer contacts.
- Launching an **awareness-raising campaign across our Cambridge and South Staffs regions**, using television commercials and social media to encourage customers to 'waste not one drop' and use water wisely. We also launched a 'Can for the Cam' campaign in our Cambridge region to encourage more customers to swap their hosepipes for a watering can, helping them to save water and protect the rare chalk stream habitats that are a feature of the Cambridgeshire landscape.
- Developing our approach to **building close relationships with our business retailer customers**, using quarterly account meetings to understand – and act on – their concerns. This includes offering a 'wholesaler on wheels' service, whereby members of our Retail Market team visit retailers for high-level engagement meetings.

# 2.2 Delivering for our communities

**We are committed to being embedded at the heart of the communities we serve. For us, this means more than being just visible in our communities. It also means being there to provide help and support to those customers who are struggling to pay their water bills or who may find themselves in circumstances that could make them vulnerable. And it means educating the next generation of water champions, encouraging them and their families to use water wisely and place more value on it as a precious and finite resource.**

The start of AMP7 was dominated by the COVID-19 pandemic. When the UK Government announced the first national lockdown in March 2020 we moved very quickly, adopting different ways of working and proactively putting in place a range of support measures to help customers whose lives had been directly impacted by the pandemic. This included introducing a new Assure COVID-19 tariff, offering a 12-week discount for any customer facing financial hardship as a direct result of the pandemic. We also actively encouraged customers to contact us so that we could tell them about the support schemes we put in place and encourage those who might be eligible to sign up for our Priority Services Register (PSR). This is a free service for anyone who may need extra help because of their age, or because of medical, learning, physical disabilities or financial difficulties.

Key to our approach during AMP7 to date has been to raise the profile of the support we have available, as customers have continued to feel the long-term impacts of both the COVID-19 pandemic and the inflationary pressures associated with the war in Ukraine and the cost-of-living crisis. We have performed very well against our commitment to increase the number of customers who receive some form of financial support from us, considerably beating our targets in the first three years of the AMP. We also performed well for the percentage registered on the PSR – in 2022/23, for example, 10% of our household customer base were registered, beating our target for the year of 7.1%. Unfortunately, the criminal cyber-attack on our parent company, South Staffordshire Plc, in July 2022 meant we were unable to contact and check in with as many customers as we would have liked, so we failed that part of our performance commitment.

An important feature of our community engagement is our education outreach programme. We have an ambitious target to engage with 6,000 young people a year during AMP7 with our workshops for schools across our Cambridge and South Staffs regions. We also offer a range of teaching and learning resources, and online activity packs and quizzes. A combination of COVID-19 impacts and resource issues has affected our ability to deliver this performance commitment. Although we managed to beat our target in 2020/21, with 9,648 young people engaged – mainly by delivering online content and workshops – in 2021/22, we reached only 2,284 young people. This was because restrictions on access within schools following the pandemic remained in place for most of the year. And in the six months to March 2023, we engaged with 3,672 young people. We are confident that we will meet our target in the last two years of AMP7.

There were other commitments in our business plan that have changed over time. For example, the COVID-19 pandemic made opening another community hub in our South Staffs region unfeasible. Instead, we continued to serve customers by launching a 'water on wheels' initiative in our Cambridge region – adopting a mobile approach to community engagement. And in our South Staffs region, the Community team have hosted a series of 'pop up' events in different locations throughout 2022/23 as a way of engaging with more traditionally hard-to-reach communities. They also held a number of cyber-clinics in MPs' constituencies across our Cambridge and South Staffs regions to provide face-to-face advice in the wake of the criminal cyber-attack in July 2022.

In addition, we have not relaunched our graduate programme as planned. Instead, we expanded our education programme into secondary schools during 2022/23, meaning we now offer a range of activities and workshops for children aged from 4 to 14. We are also developing a programme for older pupils, which will align closely with their GCSE and A level studies. We are exploring the feasibility of developing a Group-wide graduate recruitment programme in AMP8.

### Initiatives delivered during AMP7

Our small Community and Customer Insight teams have been involved in a number of initiatives during the year, including the following.

- Adopting a **'one stop shop' approach to networking**, using our extensive partnerships with other organisations to seek out other forms of support and assistance for those customers who need it. This has been particularly effective in helping us to identify and proactively reach out to our traditionally hard-to-reach customers.
- Introducing an **Assure Assist tariff** for customers who have no income coming into the home and who may have applied for Universal Credit. In the first year, eligible customers receive a 100% discount for 8 weeks, followed by a 60% discount for 44 weeks. The discount in the second year is 40%.
- Continuing to **build our H2Online community** as an integral part of our ongoing customer engagement programme. We use a regular programme of discussions, surveys and vlogs to engage our H2Online members and use our 'You said, we did' feature to provide updates on how we have used their feedback.
- Going beyond water by running a **successful school uniform swap** out of our award-winning community hub in Wednesbury, running a 'dress to impress' campaign for people attending job interviews, distributing donated winter coats to people in the community with the greatest need and hosting a weekly 'Knit and Natter' group, among many other community initiatives.

## 2.3 Delivering a reliable service

**Our customers always expect to receive water of the highest quality from us. We have a rolling programme of investment and maintenance in place to ensure the long-term resilience of our assets and a secure water supply for customers across our Cambridge and South Staffs regions.**

At the heart of our business plan for 2020 to 2025 was our cost adjustment claim to upgrade the largest water treatment works in our South Staffs region – Hampton Loade, which was built in two phases between 1966 and 1972; and Seedy Mill, which was built in 1949. Nearly 60% of customers across the region receive their water supplies from these two treatment works. So, they are critical assets for us. We have consistently invested in both works in successive AMPs, including implementing UV treatment during the 2015 to 2020 planning period (AMP6).

When we were considering our cost adjustment claim we looked carefully at how these two works compared with others in the water sector – both in relation to their size and in the number of customers they supply. At the time, we ranked third behind Bournemouth Water and Bristol Water (now both part of Pennon Group, South West Water's parent company) in terms of our reliance on large works. Hampton Loade is also one of the largest water treatment works in the sector, with an average output of 175 megalitres of water a day (Ml/d)[6].

Because of their size, we recognised that any investment in both works was going to be significant. So we carried out an extensive review of the options available to us, bringing in credible external expertise to help us shape our plans and engaging with our regulators. We concluded that installing an extra treatment stage at both works, coupled with a cleaning programme for nearly 100 km of strategic trunk mains, would deliver a number of benefits for customers, including:

- a material reduction in the incidents of discoloured water;
- the removal of disinfection by-products from the treated water;
- the water we supply to customers having an improved taste and smell; and
- significantly increased resilience by minimising the risk of single points of failure within the treatment process.

In our PR19 final determination, we were awarded £68 million through our cost adjustment claim to upgrade the treatment processes at both works. This represents 92% of the total funding we asked for. We committed to delivering the upgrades in line with the Notices from the DWI. For Seedy Mill, this meant bringing the new filtration plant into commission by 31 March 2023; for Hampton Loade, the target deadline is 31 March 2024.

Unfortunately, in October 2021 our construction partner, NMCN, went into administration, putting the delivery of both schemes on hold. We appointed Galliford Try as the replacement construction partner at Seedy Mill in December 2021 and work started again at the site. Ross-Shire Engineering and Barhale were appointed in May 2022 to complete the work at Hampton Loade. The work at Seedy Mill was completed on schedule and brought into commission in March 2023. We discuss our progress at the Hampton Loade treatment works in more detail in section 2.6 below.

Our research tells us that having clean, high-quality water supplies is consistently one of the most important priorities for our customers. The key regulatory measure for water quality is our Compliance Risk Index (CRI) score, which is designed to illustrate the risk arising from treated water compliance failures and which aligns with the DWI's stringent drinking water quality standards. In 2020/21, the first year of AMP7, we saw an improvement in our CRI score compared with the previous year. But our performance has continued to remain above the DWI's target score of zero. We are confident that the upgrade programmes at Hampton Loade and Seedy Mill, for example, will help us to ensure we continue to deliver reliable clean water supplies to our customers in line with our regulatory obligations.

Another important water quality measure for us relates to the number of contacts from customers about the taste, smell and colour of their water. We are pleased with our exceptional performance in this area during the first three years of AMP7, beating our targets each year. In 2022/23, for example, we received only 0.65 contacts per thousand of population about the acceptability of the water we supply, compared with our target for the year of 1.08. Over the course of the current planning period to date, we have seen a 42% reduction in the number of contacts from customers about the taste, smell and colour of their water. This achievement reflects the levels of investment we have made in this area and the commitment of our people to ensure we always supply water of the highest quality to our customers.

Key to us always being able to do this is the health and resilience of our assets. Having and maintaining good asset health is crucial, so delivering year-on-year improvements is something we actively strive for. Another area where we have performed well is in relation to unplanned interruptions to supply, with performance being driven in part by improvements we have made to our event handling processes. So far, we have outperformed our performance commitment in each year of the current AMP – including delivering sector-leading performance in 2021/22 and beating our target of 6 minutes and 30 seconds by nearly three minutes.

In addition, we have put more focus into finding and fixing leaks quickly, as this is a top priority for our customers and an area where they always expect us to deliver meaningful improvements. To that end, we introduced a new AMP7 target for visible leak repair, putting in place new systems and processes to enable us to track these types of leaks and to respond quickly when they are identified. This focus has paid off – in 2022/23, we achieved our target of finding and fixing 90%

[6] Megalitre = one million litres.

of leaks within four days, which represents a year-on-year improvement since 2020/21.

Unfortunately, performance against some of our asset health measures to date has been more mixed. In 2020/21, for example, lengthy periods of very cold weather during the winter resulted in us experiencing our highest level of bursts in ten years, reflecting a nationwide pattern at the time. We also experienced several large bursts during 2021/22 across our Cambridge and South Staffs regions, including one at Etwall in Derbyshire which meant co-ordinating alternative water supplies for customers while we carried out the repair. And in 2022/23 the combination of a prolonged period of hot, dry weather in the spring and summers and a couple of freeze–thaw events in the cold winter that followed it also led to an increase in the number of bursts on our network. As a result, we failed our target with more than 150 bursts for every thousand kilometres of mains on our network. We are confident that our ongoing mains renewal programme will enable us to get this measure back on track by the end of AMP7.

In our business plan for 2020 to 2025 we also made a number of other commitments about the service we will deliver for our customers. Most of these commitments relate to our ongoing operational activities, such as our regular storage reservoir inspection and cleaning programme, and carrying out improvements at some of the groundwater sites across our Cambridge and South Staffs regions. We still have some work to do in the remaining two years of the AMP to deliver some of the other commitments we made in our business plan. This includes delivering our small diameter mains renewal programme and replacing our existing SCADA system.

We will continue to report our performance against our commitments each year in our regulatory reports (annual report and financial statements and the annual performance report) and on our customer-facing dashboard.

### Initiatives delivered during AMP7

We have delivered a number of service-related initiatives to date during AMP7. These include the following.

- Completing the construction of **two new storage reservoirs at Bourn in our Cambridge region**. The reservoirs have a combined capacity of 8 million litres, bringing the total capacity of the site to more than 12 million litres. This is enough water to supply the 14,000 properties that currently receive water from Bourn, and to accommodate planned development in the area, which is likely to result in another 8,000 new connections to our network by the end of the current planning period in 2024/25.
- Investing in a **'smart' network to give us better information about how our network operates**. The aim is to proactively identify faults on our network before they impact our customers. This includes using acoustic loggers to help us locate leaks. We are also exploring whether we can use other smart network sensors to detect leaks quickly on our network.
- Implementing a **new investment optimisation tool called Copperleaf H2O**, which enables us to model risk associated with the availability of our assets, and how this can change over time. It also helps us to identify which investments to defer in the event of funding or other constraints. And it helps us to make informed decisions that maximise value while proactively managing risk. (See case study on page 41 for more detail.)

## 2.4 Delivering for the environment

**We all know that water is precious resource – and something to be valued. As a society, we expect to always have access to clean water without necessarily thinking about any potential environmental impact of getting that water from source to tap. At South Staffordshire Water we take our environmental stewardship role seriously. So while we recognise the need to ensure water is always available to supply our customers, it is also crucial to make sure we continue to enhance and protect the environment from where we abstract that water – and work to leave it in a better state for future generations.**

One of the ways we do this is by minimising the volume of water that leaks from our network of pipes. This is always a top priority for our customers. It is also an important commitment for us because reducing the volume of water leaking from our pipes means more water is left in the natural environment. In our business plan for 2020 to 2025 we committed to deliver ambitious leakage reductions of at least 15% across both our Cambridge and South Staffs regions over the five-year period. This meant us making a step change in our leakage detection approach, and committing to finding and fixing more leaks quickly (as outlined in section 2.3 above).

In the first three years of AMP7, and despite difficult operating conditions at times, we outperformed our leakage targets in both regions. Because we know how important it is for customers that we tackle leakage in a sustainable way, we want to make sure our data is as robust as possible. So, in 2022/23 we developed a new household water night use model for our South Staffs region, which gives us a more accurate picture of water use. The new model uses 15 assurance metrics instead of 8 and also includes an improved seasonality factor, which enables us to take daily weather changes into account. This means we can target leakage reductions more effectively as it is easier for us to detect spikes in water use that could indicate a leak. It also enables us to review our leakage data back to 2017/18, making it more robust overall. Our technical auditors, Jacobs, have assured our new approach and consider it to be a better model for assessing and reporting our leakage levels.

But a new leakage model is only part of the solution. We have also invested heavily in additional resources, taking the leakage detection team in our South Staffs region from 26 field- and 4 office-based people to 39 field- and 5 office-based people, with another leakage analyst due to join the business during the 2023/24 financial year. We have also increased the number of people who are responsible for fixing leaks. This puts us in a very good position as we look ahead to AMP8.

Another key environmental commitment for us is the need to reduce individual household consumption – what we call 'per capita consumption' or PCC. This is the metric on which our water efficiency targets are based. In 2020/21, we saw a significant shift in household and non-household water consumption. This is a result of the unprecedented impact of the COVID-19 pandemic on everyone's daily lives, with a rise in home working and prolonged periods of hot, dry weather leading to a huge increase in household water use across our Cambridge and South Staffs regions. We have continued to see very high levels of demand during 2021/22 and 2022/23. In 2021/22, for example, household water consumption was around 7% above our target in our Cambridge region and 10% above our target in our South Staffs region.

In our Cambridge region, in common with other water companies, we have started to see PCC levels reduce. But in our South Staffs region, while we have seen some reductions, PCC has not returned to pre-pandemic levels. So, it is important for us to understand this shift between our customers and the water they use. To that end, we appointed a third-party demand management specialist called Skewb to carry out a review of our PCC underperformance and evaluate the impact of the COVID-19 pandemic on household water use in our Cambridge and South Staffs regions. Using a predictive artificial intelligence (AI) model, the consultants found that across both regions average annual water consumption had increased by between 7.14% and 13.11% since the start of the COVID-19 pandemic, and that we were continuing to feel this impact. We have worked with Skewb to develop a delivery plan for the remainder of AMP7, with a focus on:

- metering and tariffs;
- water efficiency measures, including giving water efficiency devices to customers;
- working with developers to build more water efficient homes; and
- delivering a step change in multi-channel engagement campaigns.

This is underpinned by a programme of customer communications and campaigns, and community outreach work. The main outcome of this work is that delivering more impactful and targeted campaigns now form a core part of our business-as-usual (BAU) engagement.

We are conscious of the impact our activities have on the environment and work hard to minimise that impact. This includes delivering against our WINEP obligations. It also includes managing the volume of water we abstract from environmentally sensitive sites, as measured by our abstraction incentive mechanism (AIM) target. This is the means by which we can reduce abstractions from environmentally sensitive sites across our Cambridge and South Staffs regions when river flows are low.

In the first two years of the current planning period we continued to manage the volume of water we take from the environment, despite the challenges we face with sustained higher demand and prolonged periods of hot, dry weather. Unfortunately, in 2022/23 we over-abstracted at two sites in our Cambridge region (Abington by 31% and Great Wilbraham by 24%), in breach of our licence conditions. This was to ensure we maintained supplies to customers and to meet very high demand. We have carried out a full review to identify and implement lessons learned and corrective actions to ensure there is no future recurrence of this issue.

One area where we are continuing to outperform our environmental targets is in delivering environmental improvements and biodiversity benefits across our Cambridge and South Staffs regions. Our PEBBLE[7] biodiversity fund and SPRING[8] catchment management programme are key to driving our performance in this area. By the end of the 2022/23 reporting year, for example, we had helped to protect or enhance the environment across 783 hectares (the equivalent of 783 full-size rugby pitches) across both regions, beating our target by 332 hectares. We will continue to promote our environmental activities in the remaining two years of AMP7 to ensure we deliver long-term, sustainable improvements.

In our business plan for 2020 to 2025, we set out our plans to incentivise developers, self-lay providers (SLPs) and NAVs that commit to build homes with water efficiency levels of 100 litres per person per day (l/p/d). Under this scheme, we offered rebates of up to 40% in the applicable infrastructure charge for new build developments accredited by the Building Research Establishment[9] through either the Home Quality Mark (HQM) for housing or the Environmental Assessment Method (BREEAM) for high-rise residential developments. During the first three years of the AMP, we have remained ahead of the cumulative targets we committed to in our business plan and are continuing to discuss with our developer customers how we can continue to drive greater water efficiency with this scheme.

Another key commitment for us is to reduce our operational carbon emissions, which we measure in kilograms per connected property. We have met our target in each of the years in AMP7 to date. We have done this primarily by switching to renewable energy sources at all our operational sites. We also developed a net zero strategy during 2021/22, which describes how we will continue to target efficiency across all our assets and operations. And we received delivery of our first electric vehicles in 2022/23. Once this first cohort has been delivered, around 38% of our light vehicle fleet (11% of our total fleet) will be electric.

We also set ourselves the task of delivering other environmental commitments during the current planning period. This includes the following.

[7] Projects that Explore Biodiversity in the Local Environment. See PEBBLE Fund (south-staffs-water.co.uk).
[8] Slug Pesticide Rethink – Ideas for Nurturing Growth. See SPRING - Slug Pesticide Rethink - Ideas for Nurturing Growth (south-staffs-water.co.uk).
[9] The Building Research Establishment (BRE) is a multidisciplinary building science centre. Its stated mission is to improve the built environment and make it better for everyone.

- Using **summer and winter readiness campaigns, along with water audits and water efficiency devices,** to encourage customers to save water.
- Expanding our **SPRING catchment management programme** to include a further groundwater catchments.
- **Surveying and investigating Invasive Non-Native Species** (INNS) at 100 sites, to prevent their spread.
- Making sure the water we take from the environment complies with the **Eels (England and Wales) Regulations and the Fisheries Act**.

We still have some commitments to deliver, including around making our own sites more water efficient and meeting the environmental objectives of the WFD in preventing deterioration in the sources from where we abstract our water. We are working to deliver these commitments by the end of AMP7.

### Initiatives delivered during AMP7

We have delivered a number of environmental initiatives to date during AMP7. These include the following.

- Using innovative **satellite technology to detect leaks** and help deliver our ambitious leakage reduction targets. The system uses radar sensors to look for the unique signature of underground drinking water, which may indicate a leak. It then produces images that can be shared with our field-based teams who can investigate the area identified to pinpoint the leak.
- Working with Anglian Water, Severn Trent Water and United Utilities on a **project designed to target district metered areas (DMAs)** using models to explore why water flows have changed. Again, this is could potentially help us to detect more leaks on our water network.
- Working with Cambridge City Council and specialists from Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trusts and the Wild Trout Trust to commission a **specialist analysis of the rare chalk stream habitats in our Cambridge region**. The aim is to understand the pressures placed on these water bodies and to set out a programme of actions and partnership working opportunities for local groups and other stakeholders.
- Teaming up with Affinity Water and farmers in our Cambridge region in a **reverse auction scheme** originally developed by Wessex Water. EnTrade operates online markets for nature-based solutions, providing farmers with a reliable income stream by encouraging them to sell environmental credits from their land. For our part, we have funded the planting of cover crops to help capture nitrates in the soil. This in turn dives biodiversity benefits and helps improve soil health.

## 2.5 Delivering for our business

**In our business plan for 2020 to 2025 we committed to run an efficient business with people who are happy in their jobs, where our customers pay their fair share, and where we treat our suppliers fairly and in line with the Prompt Payment Code. We also set ourselves the target of achieving Investors in People (IIP) accreditation during the 2020/21 financial year.**

IIP is an internationally recognised scheme that aims to support businesses in getting the best out of their people. It looks at how a business leads, supports and improves its people – and any steps it could take to do this better. We achieved accreditation at the Standard level in December 2020. This was the first step in our IIP journey and demonstrated that we have the principles and practices in place around supporting people and that everyone understands how to apply them to make the working environment a better place for everyone.

Our IIP report highlighted a number of areas where we perform well, including around the commitment of our people to deliver excellent service and supporting our people's wellbeing during the COVID-19 pandemic. Subsequent reviews have noted our success in keeping people informed, and providing flexibility and support for our people. We also received an action plan on areas where we need to improve, including in the areas of reward and recognition, encouraging greater collaboration between teams and departments, and adopting a more structured approach to talent management.

To help us deliver continued IIP improvement, we also have a specific commitment for employee engagement. To date, we have focused much of our attention on improving the channels we use to communicate with and engage our people. This has included setting up WhatsApp groups for our field-based teams and relaunching our monthly employee newsletter. In addition, we have held special induction sessions for people returning to our offices after COVID-19 restrictions were lifted and continued to deliver against our IIP action plan. We have also run and participated viewpoint surveys at a water company and Group level on a range of topics, including mental health and wellbeing. And we have launched four new values for the business, which focus on:

- **equality, diversity and inclusion**, which means embracing and valuing all our people, while adopting diverse and inclusive approaches;
- **excellence in service**, which means leading by example to improve ways of working, while going above and beyond for all our customers;
- **responsibility**, which means being motivated to deliver high standards, while demonstrating ownership and responsibility for delivering business objectives; and
- **trust**, which means respecting and valuing those we work with, while building trusting relationships and empowering others to make decisions.

We have embedded these values within our annual appraisals process to ensure they are central to all our people's objectives. They are also reflected in our company policies and in our expectation that the values of our supplier and contractor partners align with these. As a result, we think they help us to deliver the outcomes our customers have told us are important to them and meet the targets set out in our performance commitments.

In 2022/23, along with other South Staffordshire Plc companies, we participated in a Group-wide employee engagement survey. This used a methodology that focused on an assessment of employee needs to deliver a Net Promoter Score (NPS). Any NPS above zero is good and we have committed to achieve an NPS of +10 by the end of AMP7. We have not yet achieved our target in this area and still have a way to go to ensure our people feel fully engaged. We will continue to focus on engaging our people during the final two years of AMP7 and will continue to report our progress in our regulatory reports each year.

We know how important it is for our customers, suppliers and other stakeholders to trust us. Without this trust our legitimacy as the provider of an essential public service is broken. One of the ways we are continuing to build and maintain this trust is by making sure that everyone who should be paying a bill is doing so. So, we have a commitment to reduce our levels of bad debt[10] and encourage all our customers to develop regular and sustainable bill-paying habits. In the first two years of AMP7, we saw an increase in our bad debt. This was because of a higher level of missed payments that stemmed from the financial impact of the COVID-19 pandemic. We also suspended our normal debt collection activity in 2020/21 because we were acutely aware of the effect of these financial impacts on our customers. We managed to get our performance back on track in 2022/23 and think our Aptumo billing system will help us proactively identify those customers who may be struggling to pay their water bills.

We also have a commitment to validate the number of void sites in our property records and bring them into charge if the sites are occupied. During the first three years of AMP7, we followed a new void checking process that focused on desk-based activity to determine our levels of void through credit checking (as per our performance commitment). We have met this target every year to date by checking 100% of void properties through this process. But rather than reducing our voids position, it highlighted a significant increase that we had not anticipated. In 2022/23, we carried out a review of our household customer base and identified 20,000 properties where the last recorded contact was more than two years ago. A credit reference agency review confirmed that, of these, 4,904 properties were unoccupied – or void – premises. We have already put plans in place to mitigate this, and are hopeful that Aptumo will help us keep track of the number of void sites in our Cambridge and South Staffs regions and enable us to validate them in line with our target.

Another way we engender trust is by treating our suppliers fairly and paying them in a timely manner. This is particularly important for small businesses and those that are critical to our day-to-day operations. In our business plan for 2020 to 2025 we committed to paying companies with turnover less than £6.5 million within 30 days of receiving their invoice, in line with the Prompt Payment Code[11]. While we have seen some improvement in our performance in this area – in 2022/23, for example, we paid 69% of our smaller suppliers within 30 days – we still have some work to do in this area and are exploring ways to improve on this in the final two years of the AMP.

As with our other outcomes, we made a number of non-performance related commitments about our business and how we share information with our customers. Key among this is our commitment to set out in advance the components of our approach to performance-related pay, and the threshold and stretch levels as they apply with reference to the targets set out in our PR19 final determination from Ofwat. This is something we publish in our regulatory reports each year, and which we make available on our website. We have also adopted Ofwat's proposed mechanism for outperformance payments whereby 50% of the outperformance payment is shared with customers if the 3% return on regulated equity (RORE) threshold is reached.

And we have continued to engage in two-way conversations with our people through our regular Executive roadshows across our principal sites in both regions. This gives our people the chance to raise suggestions and concerns with members of the Executive team in an informal environment – usually over a coffee and a slice of pizza. We will continue to review the format of these sessions going forward, so that they always meet the needs and expectations of our people.

One area where we have not yet reached our target is for the number of apprentices we recruit and train. In our business plan, we committed to hire and train 25 to 30 apprentices over the five years to 2025. To date, we have recruited 19 apprentices in various roles across our Cambridge and South Staffs regions, 11 of whom are still with us. At the time of writing, seven apprentices have completed their training and have transitioned into permanent roles across the business. In 2024/25 we are looking to recruit another eight apprentices across our water production and customer liaison functions.

We think our apprenticeship programme delivers a number of benefits – for us and our apprentices. It gives them the opportunity to learn all the skills they need for the future water careers, including studying for recognised qualifications while earning a salary and gaining valuable work experience. For our part, we see our apprentices as an important part of our succession planning, helping us to build a highly skilled work force for the future.

[10] By 'bad debt', we mean the failure of some customers, for whatever reason, to pay their water bills. Bad debt adds around £8 a year to the bills of paying customers.
[11] The Prompt Payment Code is a voluntary code of practice that sets standards for payment practices between organisations of any size and their suppliers.

### Initiatives delivered during AMP7

We have delivered a number of initiatives across the business to date during AMP7. These include the following.

- Launching a **new Maximo works management system** across our Cambridge and South Staffs regions. This is delivering a number of benefits across the business, including improving our work planning, scheduling and delivery processes; enabling mobile working through Maximo Anywhere; and improving the governance and efficiency of our supply chain processes.
- Publishing a **supplier code of conduct**, which outlines our expectation of how our suppliers, and their supply chain partners, should act when providing us with goods and services. It highlights the importance to suppliers and their partners of aligning with our values and of always doing the right thing.
- Launching a **new Cambridge Water logo** in August 2021 to create greater continuity between our Cambridge and South Staffs regions, strengthening our brand in the process. The new logo was developed by our in-house design team and tested with Cambridge-based members of our H2Online community before being launched.
- Partnering with the **Womens' Utilities Network (WUN)** to encourage more women into the utilities sector in general and our business in particular, while providing resources and mentoring opportunities for all our women.

## 2.6 Building back better – green recovery funding and accelerated delivery

**Following the widespread social and economic upheaval caused by the COVID-19 pandemic, the UK Government launched a number of initiatives in the second half of 2020 to encourage economic growth post-COVID, with an emphasis on green recovery. As part of this, government and sector regulators encouraged water companies in England and Wales to revisit their investment programmes for 2020 to 2025 by:**

- accelerating the delivery of their existing plans, including measures to protect the environment;
- bringing forward proposals from 2025 and beyond; or
- submitting green recovery proposals that provide benefits to local communities and the environment.

In light of this, and also the water sector's commitment to achieve net zero operational carbon emissions by 2030, we decided to revisit our proposals to upgrade Hampton Loade – the largest water treatment works in our South Staffs region, and one of the largest works on the River Severn.

### 2.6.1 Our green recovery initiative

As part of our AMP7 business plan proposals, we submitted a successful cost adjustment claim to enable us to carry out an ambitious upgrade programme at the two principal treatment works in our South Staffs region – Hampton Loade and Seedy Mill. These are strategically important works for us as they supply water to around 60% of customers across the South Staffs region.

As outlined in section 2.3 above, in our cost adjustment claim we set out our plans to introduce an enhanced second-stage filtration at both works during AMP7 and also enhance the clarification stage in AMP8. At the same time, we said we would improve the operational resilience at each site by minimising the risk of single points of failure. We also said we would carry out a cleaning programme for around 100 km of strategic trunk mains to ensure customers quickly feel the benefits of the upgrade programme in terms of the quality of the water they receive from us.

The cost adjustment claim allowed for the installation of primary rapid gravity filters (RGFs) near the existing clarifiers and the introduction of a new mains connection from the primary RGFs to the existing RGFs. These would then be converted into granular activated carbon (GAC) adsorbers, creating a second filtration stage downstream of the RGFs.

Our green recovery submission related to specific changes we wanted to make to our plans for Hampton Loade. We engaged with customers about these changes, most of whom were supportive of our approach. Instead of our plans to install new RGFs and clarifiers at the works over a ten-year period, we decided to pursue an innovative ceramic membrane-based solution, which we think will deliver a number of benefits for customers and the environment, including:

- enhanced water quality – this is consistently a top priority for our customers, and one of the most important areas in which they always want us to invest;
- a reduction in carbon emissions of around 1,000 tonnes a year;
- improved operational flexibility and resilience; and
- the potential for increased local employment opportunities.

Once complete, it will be the largest deployment of ceramic membrane technology in the UK, if not in Europe. It will also be the first retrofit of its kind in an existing water treatment works.

In July 2021 Ofwat confirmed its decision to allow additional funding of £17.6 million (in 2017/18 prices) under the green recovery initiative to accelerate the installation of the ceramic membrane filters at Hampton Loade. We are contributing £9.7 million to the project, while Severn Trent Water, which shares the asset, will contribute £7.9 million. We were the only water only company to submit a bid under this initiative – the others being Severn Trent Water, South West Water, Thames Water and United Utilities.

At the time of writing, we have made significant progress with this project. This is despite our original construction partner, NMCN, going into administration in October 2021 (see section

2.3 above). Construction of the new filtration building is well under way and a new sludge thickener and sludge storage tank nearing completion. In addition, the new ceramic filters have arrived, and offsite assembly is progressing. We remain on track to deliver this element of the Hampton Loade upgrade programme in line with the March 2024 deadline agreed with the DWI.

## 2.6.2 Our accelerated delivery programme

Together with Anglian Water, we have been developing a strategic resource options for customers in our Cambridge regions – the Fens reservoirs (see case study on page 48). We have successfully taken this through the Regulators' Alliance for Progressing Infrastructure Development (RAPID) gated process during this planning period. Having considered many options, we are confident this is the best solution to meet the demand from growth expected on our Cambridge region and the levels of abstraction reduction required to enhance the chalk aquifers from where we take our water and that feed the chalk stream habitats that are a feature of the region. Through the RAPID process, we have accelerated £18.2 million of investment for Fens reservoir planning to enable us to get through gates 2 and 3. This will be recoverable during AMP8 through the true-up mechanism.

In October 2022 the Department for Environment, Food and Rural Affairs (Defra) asked the regulated water companies in England to submit infrastructure schemes for accelerated delivery in the final two years of AMP7 (2023/24 and 2024/25). We actively took part in this process by submitting six schemes for accelerated delivery. Ofwat approved our household and non-household metering programmes for our Cambridge and South Staffs regions.

However, the funding mechanism for the accelerated delivery programme is, like the RAPID process, subject to a true-up at AMP8. There is also uncertainty around the efficient unit costs that would be allowed. So, we are unable to facilitate the acceleration of the investment. Our commitment to the Fens reservoir project has taken priority as its fast development is critical to meeting the long-term water resource needs of our Cambridge region. In addition, further investment subject to true-ups created challenges for our financial metrics and risked bill shocks for our customers when transitioning to AMP8. We provide more detail on the funding challenges created by the Fens reservoir project in SSC03 'Fens reservoir – our approach into AMP8'.

Defra's process has still proved beneficial in helping us to develop this business plan. In the next 18 months, we will catch up on our AMP7 metering programme, as we are behind our PR19 target as a result of the impact of the COVID-19 pandemic. This will enable us to trial the delivery of universal metering, making sure we have a robust customer journey in place and helping us to avoid delays in AMP8. In addition, the process has allowed us to evaluate and develop the six schemes we put forward in October 2022, in light of Ofwat's feedback. In table 2 below, we outline the changes we have made and how we have addressed Ofwat's concerns. The early submission allowed to get ahead of planning and build business cases for AMP8. We think this business plan is stronger as a result of this.

**Table 2 Accelerated delivery schemes**

| Scheme put forward to Ofwat for accelerated delivery | Included for PR24 | Justification |
|---|---|---|
| **Universal metering programme for household customers**, as detailed in the draft WRMPs for our Cambridge and South Staffs regions | Yes | Ofwat supported the justification for this scheme. We have progressed the case, including considerations for deliverability and making sure we deliver our AMP7 ambitions first. We have also updated our unit rates to reflect the efficiency savings identified through universal roll out. |
| **Enhanced metering programme for non-household customers**, as detailed in the draft WRMPs for our Cambridge and South Staffs regions. | Yes | Ofwat supported the justification for this scheme. We have progressed the cased by specifying investment for new and replacement meters and removing the base expenditure element of the case. |
| **Drought resilience option for our Cambridge region** that explores the potential for water re-use. | No | This option was in the very early stages of development. We are continuing to work with our neighbour, Severn Trent Water, to determine the validity of this scheme for our future drought plan. |
| **Borehole improvement programme** in our Cambridge region. | Yes – but with updated solutions | We amended the justification of this scheme as resilience of water supply, as opposed to new water resources not covered by the WRMP. We have also determined part of the proposal will be delivered through base expenditure; and we have used systematic optioneering to determine the best value solutions for resilience across our network. |

| Scheme put forward to Ofwat for accelerated delivery | Included for PR24 | Justification |
|---|---|---|
| **Chalk stream restoration** projects in our Cambridge region. | Yes | This scheme forms part of our WINEP, and has been included in this business plan following agreement from the Environment Agency. Our chalk stream restoration programme will deliver mostly soft engineering solutions to restore and protect these environments and support meeting good ecological status. This scheme aligns with Defra's Chalk Stream River Restoration Group. |
| **Delivery of a bulk water supply from Anglian Water's Grafham Water reservoir.** Anglian facilitated this by also making a submission – the company will have to install a main into our Cambridge region, to which we would then make a connection. | Yes – but an updated solution | Following feedback from Ofwat and additional feedback from the Environment Agency on the draft WRMP submission for our Cambridge region, this version of the Grafham transfer has since been removed as a feasible option because of the reliance on drought permits in Anglian Water's supply area.<br>Through regional planning and close working between WRE and WRSE (Water Resources South East), this option has been developed to create a larger transfer from Grafham Water, this time enabled by the Minworth and Grand Union Canal strategic resource options, which will enable Affinity Water to reduce the volume of water it currently transfers from Grafham. This will free up 26 Ml/d capacity to be transferred to Cambridge Water. This new option has been included in the revised draft WRMPs for our Cambridge region, Anglian Water and Affinity Water. It has also been included in each of the three companies' AMP8 business plans. |

# 3. An ambitious plan for customers and the environment

## The overarching theme for this business plan is about securing the water future for customers, communities and the environment we all rely on and enjoy. Encapsulated within this is the need for everyone in society to place more value on water as a precious and finite resource.

As the provider of clean water only services across two socially and geographically diverse regions, we have an important part to play here – building resilience in our networks and educating current and future customers on the need to use water wisely. Our AMP8 business plan builds on our previous five-year plans and lays the foundations for future planning periods. This long-term thinking is at the heart of all our decision-making.

We have built on the ambition of our AMP7 plan, developing an optimal approach to business planning that will serve us well over the long term. Over the course of AMP8, we will spend and invest around £819 million in proactive customer services and resilient infrastructure. In addition, in response to Ofwat's challenge to the water sector, we will spend more on our infrastructure renewals expenditure (IRE), substantially renewing the networks in our Cambridge and South Staffs regions, while remaining cost efficient. At the same time, we will continue to enhance and protect the environment, making sure we leave it in a better state for future generations.

As this plan forms part of our LTDS, our focus is on delivering our ambitions for:

- the services we provide;
- our local environment;
- our household and non-household customers;
- the local communities we serve; and
- our business, now and in the future.

Our plans have been informed by comprehensive and robust customer and stakeholder engagement. We discuss this in more detail in chapter 4 on page 69. We have also carried out affordability and acceptability testing in line with regulatory guidance. The outcomes of the research we conducted, and what this will mean for customers' bills are set out in chapter 5 on page 109.

We summarise our AMP8 plans in the following sections. More information on our investment optimisation framework and the analysis that sits behind this overview can be found in part 2 of this document – 'Meeting our regulatory requirements' – on pages 68 to 147.

## 3.1 Providing high-quality, resilient services

**Our service**

We will use **cutting edge technology** and ensure the infrastructure is in place so that customers always receive resilient, high-quality water supplies.

**We recognise how important it is to maintain our assets and to balance this with the need to ensure resilience over the long term. By building this resilience across all our operations, it enhances our ability to respond to unplanned incidents and ensures we can always deliver a reliable service for our customers.**

We have developed our approach in line with the core principles of asset management. These are that:

- assets exist to deliver services that customers and stakeholders value;
- all assets have a discernible lifecycle and that understanding this lifecycle enables effective management;
- failure occurs when an asset can no longer do what is required of it in its operating environment;
- not all assets fail in the same way;
- not all assets of the same age fail at the same time;
- not all asset failures have the same consequences; and
- investing in an asset over its lifecycle can help to mitigate performance risk[12].

[12] 'Fundamentals of asset management – a hands-on approach'. https://www.epa.gov/sites/default/files/2016-01/documents/welcome-overview-asset-management.pdf

We have also built our approach on the recommendations of Ofwat's asset management maturity assessment. We discuss this in more detail in section 6.1 on page 110. This has enabled us to:

- develop new models for the long term;
- adopt a data-driven approach to risk identification and option selection; and
- implement a multi-tier approach to costing across the business.

This has, in turn, provided us with more rigour in how we link our AMP8 plans with our LTDS.

More detail on the information provided in this section can be found in SSC37 'Our asset management approach to best value investment planning through 2025 to 2030 and beyond' and SSC36 'Evidencing our enhancement expenditure in 2025 to 2030' published alongside this document.

During AMP8 we will invest £150 million net base capital expenditure to maintain our assets for long term. This includes investment in our non-infrastructure assets to:

- deliver our stretching WRMP leakage reduction targets for our Cambridge and South Staffs regions (see section 3.2.1.1);
- improve our storage resilience with the construction of two new reservoirs;
- maintain our boreholes; and
- reduce risks to raw water quality.

We will also invest £84 million net capital expenditure to:

- rehabilitate 254 km of mains across both regions;
- carry out mains diversions;
- deliver a programme of strategic valve and pipe bridge maintenance; and
- improve water pressure issues through a customer communications pipe replacement programme.

And we will invest £140 million net capital expenditure to enhance our assets under several work programmes that focus on:

- making the best use of our water resources;
- providing high-quality drinking water;
- delivering water at the right pressure; and
- running a sustainable business.

There is direct line of sight between these programmes and the long-term ambitions set out in 'Looking to the future'.

We will continue to invest to meet our regulatory requirements, including those defined by our WRMPs and our WINEP obligations. In addition, we will see a significant uplift in investment in demand-side solutions, including delivering a universal metering programme (see section 3.2.2.2). In our AMP8 plans we have also included several schemes that have support from the DWI. These include enhanced disinfection, as well as nitrate and manganese treatment at some of our sites.

And we will invest in renewables at selected sites across our network as part of our commitment to delivering net zero operational carbon emissions (see section 3.5.1).

### How we are securing your water future...

"I work to understand our assets so we can proactively manage risk and make best-value investment decisions, now and in the future" – Kevin Scarle, Asset Management Analyst

Our enhancement activities form a critical part of our performance commitment ambitions and are essential for delivering our AMP8 targets.

## 3.1.1 Delivering high quality water

A fundamental part of our operations is to provide clean, high-quality water supplies to our customers. Key to this is protecting the raw water quality of our sources as this dictates how effective our treatment processes will be.

### 3.1.1.1 AMP8 base expenditure

The focus of our base expenditure in this area is on re-introducing storage to improve our resilience. We will invest in two strategic service reservoirs at Barr Beacon and Langley in our South Staffs region. Our modelling (see chapter 6 on page 110) suggests that these reservoirs are some of the least resilient in terms of emergency storage time, sitting at the lower end of the scale compared with our 2050 ambition of achieving 24 hours' emergency storage. So, these investments form part of the core pathway for resilience investment in our LTDS and are critical if we are to deliver our service ambitions.

- Barr Beacon 1 storage reservoir. Built in 1899, we took the reservoir out of supply in 2017 for routine maintenance. While carrying out this work, we identified some other structural risks and the reservoir has been out of supply ever since. Barr Beacon 1 has a total storage capacity of 46.19 Ml; without this, Barr Beacon 2 (capacity 44.38 Ml) is at risk because of the low levels of emergency storage available to a large water supply zone comprising nearly 89,000 properties. The reservoir also provides resilience for other water supply zones in the area. If there is a problem at Barr Beacon 2, this would disrupt the water supplies to a significant number of people across the region. To mitigate this risk, during AMP8 we will demolish the existing Barr Beacon 1 storage reservoir and replace it with a new 46.19 Ml storage tank in the same location. This will provide additional resilience in the form of greatly improved water storage capacity for the water supply zone.

- Langley storage reservoir. We will decommission the exiting reservoir and rebuild it, increasing its capacity from 4.59 Ml to 10 Ml. Our expectation is that 60% of the costs

for this work will come from enhancement spend (see section 3.1.3.2 below for more detail).

We recognise that the ongoing maintenance of our storage reservoirs and towers is essential to the service we provide to customers. We must always maintain these assets in a condition that allows clean, wholesome water to be stored without posing a risk to water quality and without the risk of structural defects that could make them unsafe for us to operate. We will continue with our ongoing programme of inspection and cleaning during AMP8 to mitigate the risk of failure.

We will also carry out proactive remedial work on some service reservoirs and towers where inspections we have already carried out have identified risks that require mitigation during AMP8. In our Cambridge region, for example, this includes:

- installing new roof membranes, as appropriate;
- reinforcing floors and wall joints; and
- applying protective coatings to floors, walls and internal pipework.

In addition, we will continue to invest in our programme of inspections and remedial works at groundwater pumping stations across our Cambridge and South Staffs regions. We will also carry out work to reduce the risk of spillages at our groundwater sites. And we will deliver improvements at some of our boreholes and pumping stations as outlined below.

- Borehole maintenance programme. Our boreholes provide the means for us to abstract water from groundwater aquifers. In our Cambridge region, all the water we abstract from the environment comes from groundwater sources; in our South Staffs region, boreholes provide water to around 40% of our customers. We started our borehole inspection programme in the five-year period from 2010 to 2015 (AMP5) and continued it in 2015 to 2020 (AMP6) and in the current AMP. We will continue to invest in our programme of borehole inspections and surveys. This includes carrying out remedial works at sites where our inspection programme to date has identified that this is required.

- Source pumping stations and booster assets programme. We will invest in a proactive maintenance programme for our pumping and treatment assets. This includes carrying out full site refurbishments at a small number of our older sites, replacing dosing equipment at some sites and replacing monitors and control vales that are reaching the end of their useful life. We have prioritised source station resilience in our Cambridge region with this expenditure, which has less system interconnectivity across the network when compared with our South Staffs region.

We will continue with our programme of maintenance at our Hampton Loade and Seedy Mill water treatment works. This includes:

- investing in permanent covers for the clarification processes;
- installing new chemical treatment storage; and
- mitigating potential environmental hazards with a programme of redesign and refurbishment activity.

### 3.1.1.2 Enhancement expenditure

We are seeking £28 million to enable us to carry out several schemes that will enable us to mitigate deteriorating trends in raw water quality and improve final water quality at sites across our Cambridge and South Staffs regions. These schemes have the support both of customers and the DWI. We have divided the investment into four distinct areas of raw water deterioration: nitrates; micro-bacterial; manganese and antimony.

We have taken a holistic, whole system view of these water quality schemes. Each one has a specific water quality outcome linked to delivering our long-term ambitions to 2050, as well as outcomes that support other areas not necessarily related to water quality. For example, our proposed investment at Fradley pumping station in our South Staffs region will reduce levels of down time at the site. This, in turn, is critical in improving the level of supply resilience in a water supply zone that is difficult to manage during peak periods. These schemes also have close links with our base capital expenditure (capex) programme and have a detailed set of requirements for each site based on a hazard review carried out in 2022.

Each enhancement case considers specific water quality parameters that we are required to meet. Key among these are that we have adequate treatment processes in place to ensure clean, safe drinking water for customers across our Cambridge and South Staffs regions. For the sites we are looking at, we have considered the requirement to upgrade or install new treatment processes during AMP8. The investments are critical if we are to maintain a CRI score of less than 1. This will become more challenging to achieve if raw water deterioration goes unmitigated. They will also help us avoid one-off, low probability, high consequence events that could have a significant impact on our customers and on our performance commitments for unplanned outage, customer contacts about water quality and supply interruptions.

- Nitrates. A key outcome of our LTDS is to ensure that all sites remain below the current allowed Prescribed Concentration Value (PCV) for nitrates. This level is currently set at 50 micrograms per litre of water (mg/l). When developing our LTDS, we carried out long-term analysis of our nitrate trends. This allowed us to identify when sites might be likely to exceed PCV levels and in what timeframe. One site with rising nitrate levels for AMP8 is the Morden Grange pumping station in our Cambridge region. We are seeking funding of £6.7 million to install an ion exchange plant at the site, which will ensure the final water nitrates remain below the PCV.

- Micro-bacterial. Another LTDS core pathway is to ensure we have no sites that are marginally dosed with chlorine to treat bacteria and organic matter, to mitigate raw water deterioration risk. We plan to enhance six of our

marginally dosed sites across both regions by introducing UV treatment processes to mitigate the significant risk of outages when micro-bacterial failures are detected. By carrying out these upgrades in a planned manner, we can mitigate the operational risks associated with taking the sites out of supply as a reactive measure to a water quality failure. Because of the criticality to our operations of the sites we have identified, the proactive introduction of UV treatment will mitigate the risk of raw water quality deterioration, which could impact drinking water quality or lead to supply interruptions. We are seeking £9.5 million for all six sites to ensure supplies remain resilient for customers now and in the future. Installing enhanced disinfection at these sites also completes our long-term programme to upgrade all our marginal dosing sites.

- Manganese. Bourne Vale pumping station in our South Staffs region has seen increasing concentrations of manganese in the water that goes into our Sutton Coldfield water supply zone. While it poses no risks to human health, it can cause discoloured water. Although the levels of manganese we have identified remain below PCV, they have been accumulating in the Sutton water supply zone, which is ranked second highest for contacts from our customers about water quality. We are seeking funding of £7.8 million for a whole system solution, comprising a mains cleaning programme in the Sutton Coldfield water supply zone to remove the manganese that has been accumulating over time. We are also proposing to install a manganese removal process at the site to ensure the accumulation of manganese does not re-occur. We will install the manganese removal process before we carry out the mains cleaning programme.

- Antimony. The Fradley site in our South Staffs region currently operates three boreholes, one of which has higher concentrations of antimony than the other two. We currently blend water from this borehole with water from the others to ensure levels in the final water are compliant with the DWI's stringent water quality regulations. Our modelling tells us that the antimony in the final water at the site will reach unacceptable levels within AMP8. As the site supports the water supply in two other zones with at least 148,000 customers in total, it is reliant on borehole number 3 for the site to remain in operation. We are seeking £4.1 million to drill a new borehole at the site, which will provide more blending resilience if the other boreholes are out of supply for any reason.

As part of our raw water deterioration enhancement schemes, we submitted our proposals to the DWI for support. The DWI has reviewed them and is supportive of our proposed investments. The delivery phasing of these schemes during AMP8 is to be confirmed with the DWI. As these schemes will be monitored and reported through a regulatory body, we are not applying any price control deliverables (PCDs) against them, More information on our raw water deterioration enhancement case and the DWI support notices can be found in sections 4.1 and 6.1 of SSC36 'Evidencing our enhancement expenditure in 2025 to 2030 and beyond'.

We have two schemes where we are seeking to invest to implement solutions that will improve the levels of contaminants at the final water sampling point. This represents a step change in service, by removing raw water contaminants further below PCV and ensuring that predictions of non-compliance against PCV in AMP8 and beyond are addressed.

### 3.1.2 Lead strategy

Our core priority is to provide clean water supplies that our customers can always trust is completely safe to drink. While we have worked hard to mitigate the risk of lead entering water supplies through chemical dosing at our treatment works, we are aware that we still have further to go. In addition, the DWI expects us to focus on lead compliance and views chemical dosing as an interim, rather than a final, solution.

So, in line with our long-term ambition to reduce our reliance on chemicals, we are committed to removing lead pipework both from our assets across the Cambridge and South Staffs regions – and those of our customers. But we will do this at a rate that remains affordable to customers.

There are three components to our forward-looking lead strategy, for which we are seeking funding of £7.2 million to replace 2,000 lead connections with newer materials. To ensure customers' interests are protected, we have created a quality PCD for a lead pilot trial and our lead replacement programme. Our lead pilot trial has an output of an open data report on the quantified benefits. For our lead replacement programme, this will apply a unit rate to protect our customers from non-delivery of 373 replacements. Continuation of our efficient replacement strategy will deliver against our yearly CRI performance commitment targets, which include an analysis of lead in drinking water supplies. For more detail on our PCDs in this area, see sections 1.5 and 4.2.7 of SSC36 'Evidencing our enhancement expenditure in 2025 to 2030 and beyond'.

- Efficient lead pipe replacement. Through our AMP8 base programme, we will continue with our efficient approach to proactively replace lead pipework as part of our mains rehabilitation programme and in response to elevated lead levels at customers' properties. We will invest around £0.9 million to replace 370 lead communication pipes in response to elevated lead levels at customers' properties.

- Ensuring lead-free supplies for the most vulnerable in society. We think there are 373 primary schools and nurseries in our Cambridge and South Staffs regions that have lead pipes as part of their connections to our networks. As lead is known to affect brain development in young children, we will invest £2.7 million during AMP8 to replace the entire connection – from the main to the tap – at these properties. We have committed to delivering this programme or work before 2030.

- Carrying out a pilot trial to inform our long-term lead strategy. As well as the challenges posed by lead pipes, another area that can impact the water we supply to customers are shared supplies. These can make it difficult for us to install meters for customers who want them and can cause pressure problems. As part of our lead strategy, we will invest £3.6 million during AMP8 to lay dedicated new supplies in a representative DMA of around 1,500 properties, replacing the whole connection from main to tap. As well as informing our long-term direction of travel, we will also use this trial to share our learnings with other companies in the water sector through an open data document.

## 3.1.3 Using cutting edge technology

During AMP8 we will consider the range of technologies and approaches available to us to mitigate the risk of customers being out of supply for any length of time. We have also been exploring the benefits of implementing smart network and network calming approaches to deliver a step change in the service we deliver to customers.

### 3.1.3.1 Base expenditure

We will continue to invest in site automation technology, focusing our attention on enabling the remote operations of our sites where possible. We will also continue to invest in technology that will enable us to deliver further operational efficiencies.

We make use of extensive OT to help us monitor and control our sites. And we make every effort to future-proof our investments. But obsolescence is an increasing driver for capital investment. So, we need to be confident that we can respond very quickly to any failure in our control system assets. We will invest in a programme of proactive replacement targeting unsupported or incompatible control systems where the potential impact on the service we deliver to customers is high.

We will also continue to invest in the assets that enable us to maintain our business operations, including:

- IT business systems (both hardware and software);
- equipment;
- vehicles;
- buildings and facilities;
- security; and
- health and safety assets.

And we will continue to invest in technology that enables us to maintain the electronic security assets at our sites, including:

- asset control systems;
- CCTV;
- Intercoms and alarms; and
- Installing new CCTV at our storage assets.

**How we are securing your water future...**

*"Smart networks are about bringing near real-time data from our water network and using it to proactively manage our systems before customers are impacted" – Mike Morris, Business Lead: Smart Networks*

### 3.1.3.2 Enhancement expenditure

We are seeking approval for £2.8 million of funding to enhance the network and information systems associated with our OT. This is to ensure compliance with the Security of Network and Information Systems (NIS) Directive, which provides legal measures to protect essential services and infrastructure by improving the security of our network and the associated information systems. The key enhancements fall into the following work streams.

- Enhanced network monitoring. The aim of this work is to minimise the risk of undetected criminal or other attacks on our network instigated physically on site with the intent of gaining access to or disrupt our OT operations.

- Enhanced network segmentation. To ensure we comply with recommended best practice[13], we will introduce dedicated firewalls at our remote sites to provide additional resilience.

- PLC devices. These are used extensively across our OT network and are critical for the control and safety processes associated with the production, storage and distribution of water. We will address a potential vulnerability risk by developing a security framework across all compatible PLC devices to prevent unauthorised access to our OT systems.

- Local HMI access control. HMIs are used extensively across our OT systems to enable operators to monitor or make changes to plant operations. But as each device is protected by a single numeric code, it means changes can be made locally through the HMI without any reasonable level of authorisation and no digital audit trails. This can leave our sites at risk of malicious activity. We will invest in an electronic verification system that has the capability to record users who make changes to control parameters, including water quality alarm limits. The aim is to reduce the risk on uncontrolled changes being made locally to HMI settings.

[13] 'Recommended practice: improving industrial control system cybersecurity with defense-in-depth strategies', Industrial Control Systems Cyber Emergency Response Team, September 2016. https://www.cisa.gov/sites/default/files/2023-01/NCCIC_ICS-CERT_Defense_in_Depth_2016_S508C.pdf

We are also seeking £3.6 million in enhancement funding to deliver a smart water system trial in our Outwoods water supply zone. The trial seeks to measure and quantify the benefits of a fully integrated smart water system. We propose to share the learning from this trial in the form of an open data document to provide insights for the sector and to help other water companies make informed decisions about smart water systems in the future. Smart water systems are currently part of our LTDS core pathway within a faster technology scenario. We consider this approach will deliver a step change for us and our customers in our leading level of service.

As we have not attempted to implement a complete water supply zone system calming approach previously, we want to use the trial to help us understand how we can best appraise the benefits in future AMPs. The calm network trial will incorporate infrastructure assets, non-infrastructure assets and non-household customer assets that interact directly with our water network. We will undertake the trial in the Outwoods water supply zone in our South Staffs region, and will incorporate how the network interacts with and manages operation of the neighbouring Castleway, Hanbury and Winshill water supply zones.

We think this trial will provide a step change in terms of benefits for customers in the Outwoods water supply zone. The study we carried out with PA Consulting suggests the trial will deliver a number of benefits, including providing:

- improved interaction with customers through AI technology;
- the potential to improve levels of mains failures caused by transient pressure-related events by between 30% and 50%; and
- The potential to improve the interruptions to customers' supplies within the water supply zone.

We also think the data we gather will help us to drive down customer demand and identify potential leaks on the network.

## 3.1.4 Maintaining resilient assets

As a business with a long history of delivering services to customers, we recognise the importance of always investing in our assets to ensure their resilience to things like climate change and population growth.

### 3.1.4.1 Base expenditure

We will invest £84 million net capex in the base maintenance of our infrastructure assets in AMP8. The investments driving this spend relate to our mains renewals and mains conditioning programmes.

We need to renew our mains to manage the long-term serviceability of our network and maintain reliable services to customers. Replacing our mains at the end of their useful life also contributes to improved resilience. We have built a comprehensive mains infrastructure model that uses robust historical datasets and also looks to account for uncertainty in factors like climate change as we plan for the future.

We will continue to invest in our mains renewal programme, renewing 254 km of our mains network in AMP8 (75 km in our Cambridge region and 179 km in our South staffs region). This will include some renewals in urban or town centre locations, which can be costly. So, to deliver the most benefit, our renewals programme will target mains:

- with high leakage;
- that have large impacts to customers if they burst;
- that are susceptible to bursts in extreme weather;
- that are under capacity, causing pressure problems; and
- that are over capacity, causing potential water quality issues.

We will also continue to invest in our mains conditioning programme. This will help us to collect valuable data about the condition of our infrastructure assets. And we will continue with our mains diversion schemes – for example, when diversions are needed for new housing developments, or for road and rail improvements. We pay a proportion of the costs towards this work, which we factor into our business planning processes. The most significant scheme in relation to this work is linked to the HS2 high-speed rail link. We will continue to explore opportunities to improve resilience in this area in AMP8 and beyond.

Other infrastructure maintenance investments in AMP8 include:

- replacing communication pipes where there is evidence of leakage, poor water pressure or a risk to water quality;
- maintaining air valves to reduce the risk of catastrophic trunk main failure or surface water ingress; and
- inspecting and maintaining pipe bridges to reduce the risk of supply interruptions or damage to transport infrastructure.

### 3.1.4.2 Enhancement expenditure

We are seeking £8.3 million in funding to deliver three schemes in our South Staffs region to enhance the resilience of our distribution network. The aim is to improve our strategic network to enable us to proactively mitigate potential supply interruption risks. The enhancement investments will help us to ensure we provide customers with a more resilient and continuous supply of clean, wholesome water. Each of these schemes is summarised below.

- Burntwood resilience scheme. This is a localised resilience investment scheme within our Cannock High water supply zone. The aim is to secure resilient water supplied to around 13,800 properties within the zone. Water is supplied into the Burntwood area of the zone from Maple Brook pumping station along an 18" trunk main. We propose in install 770 m of new main, interconnecting either end into the existing trunk main network, with the aim of mitigating the risk of supply interruptions, contacts from customers about the quality of water we supply to customers and unplanned outages. It will also help to maintain water pressures in the network. Our supply PCD will provide customer protection against non-delivery of this scheme.

- Hanbury resilience scheme. This scheme forms part of our LTDS core pathway. The 7,000 properties in the Hanbury water supply zone are dependent on the Outwoods zone for their water. We propose to duplicate the 300 mm delivery main to the junction of Beamhill within the Hanbury zone (6.1 km in total) and carry out associated mains reinforcement work. This will mitigate the risk of supply interruptions and water quality contacts by enhancing the resilience of the network to maintain supplies to customers. Our supply PCD will provide customer protection against non-delivery of this scheme.

- Langley resilience scheme. The modelling we have carried out as part of PR24 suggests that our Langley/Warley water supply zone is one of the least resilient in our South Staffs region in terms of storage. The zone is heavily reliant on Langley booster, which is fed solely by Langley storage reservoir, and serves around 11,800 properties. As outlined in section 3.1.1.1 above, we proposed to increase the capacity at Langley from 4.59 Ml to 10 Ml to improve storage resilience. The current asset is 109 years old and is experiencing deterioration in asset health. The single storage container means there is no resilience in the event of a sample failure at the site, for example. This scheme will deliver enhanced resilience to supply interruptions and water quality compliance issues – particularly, as we have previously experienced compliance issues at the site (resulting from the poor design of the existing reservoir). We will implement a PCD against this scheme, ensuring an additional 5.41 Ml of additional storage will be delivered during AMP8.

These investments are critical for mitigating potentially large supply impacts to our customers. They are designed to avoid big one-off events, which could have significant consequences for customers. All these schemes form part of our LTDS core pathway.

We are also seeking £7.3 million to address a key customer priority in AMP8, ensuring we deliver enhanced production resilience at some of our critical water production sites by addressing single points of failure.

- Borehole resilience. Investment here is to provide mitigation against low probability, high consequence events and also events outside of management control, such as climate change impacts in the form of rising temperatures and more extreme weather events. These can influence the way in which customers use water, creating increasingly higher peak demand periods that extend for a longer duration. We have identified two sites that currently operate with a single borehole – and where their availability is critical to managing the supply/demand balance, particularly during peak periods. This investment will provide an additional borehole at each site.

- Booster resilience. The availability of our booster stations to either transfer water across supply zones and between reservoirs or to directly supply customers with water is a key part of our operational configurations. These booster stations are operationally critical and need to be resilient to events such as power failure. We will achieve this by addressing the current lack of alternative power supplies at three sites, installing generators and fuel tanks to increase resilience.

- Treatment works resilience. We will create additional resilience at our Seedy Mill treatment works so that we can continue to supply water where it is needed during an event. We will install a re-lift pump and pipework connectivity so that we can the strategic reservoir that cannot receive an infusion flow from other water supply zones during such events.

These resilience investments will address single points of failure within the operation of these sites and mitigate the risks associated with water supply interruptions and unplanned outage. They will also help to ensure these sites are resilient to climate change, while also enabling them to continue to be operational when impacted by things like power grid failures, raw water quality events and changes in water demand.

These investments also align with the core pathway of our LTDS. Our ambition for production resilience focuses on us making sure our treatment works and source locations continue to supply water reliably. Without this investment, our current high levels of performance – particularly in the area of supply interruptions – is at risk over the longer term.

### Securing your water future – optimising our investment needs

As a long-term business, we understand the importance of planning any investment carefully to ensure we manage our risks effectively and deliver infrastructure projects efficiently in a way that represents best value for our customers. To help us make informed decisions about the investments we need to make – and when we need to make them – we have implemented a new portfolio optimisation tool called Copperleaf H2O. This enables us to:

- model risk associated with the availability of information about our assets and how this can change over time;
- identify which investments to defer in the event of funding or resource constraints; and
- make informed decisions that maximise value while proactively managing risk.

As well as providing a comprehensive assessment of all our asset risks, Copperleaf makes it easier for us to understand the long-term exposure of those risks on our critical assets. It also considers wider business inputs, to ensure our asset management plan helps to deliver our wider strategic goals. And it enables us to make informed trade-offs between capital and maintenance costs and to create a plan that balances total expenditure and minimises overall cost. This is essential if we are to plan effectively for the long term – a key component of Ofwat's PR24 price review process.

Copperleaf employs a valuation framework to define the benefits of investments. This framework uses the 'six capitals' model (social, human, manufactured, financial, natural and intellectual capital) to support decision-making. It can be developed over time to become more bespoke to our specific requirements, providing us with more flexibility and adaptability.

In implementing this optimisation tool, we have several key business objectives that we want to deliver against, including:

- enabling us to achieve best performance in the water sector over the 2025 to 2030 planning period;
- enabling us to create consistent valuations and centralised management of the capital allocation and asset management functions of our business;
- enabling improved communication between our operations and asset management teams to help the business understand which investments have been taken forward and approved for implementation;
- eliminating the gap between our regulatory performance commitment targets and our day-to-day portfolio management; and
- enabling investment decisions to be tracked and updated, meaning our decision-making is more agile.

## 3.2 Protecting and enhancing the environment

**Our environment**

We will lead in **protecting and enhancing the environment** – working with partners to ensure sustainable water supplies and flourishing local habitats.

**In our LTDS, we have committed to protect and enhance the environment for the benefit of current and future customers. This means managing the water we abstract from the environment in a sustainable way, helping customers to better manage their own water use and improving the biodiversity of our local habitats, including our offices and production sites. And it also means keeping more water in the environment by reducing the volume of water that leaks from our network of pipes. This is a key priority for our customers – and for us.**

### 3.2.1 Ensuring sustainable water supplies

Every five years we produce long-term WRMPs that outline how we will meet the forecasted water demand needs of customers and the environment over a 25-year timeframe. These plans include the demand management and supply-side options that are likely to be needed to determine the best value plan to resolve any potential water deficits. In developing the draft WRMPs for our Cambridge and South Staffs regions, we have considered a range of demand management and supply options, including:

- leakage reductions;
- more metering;
- developing alternative water sources; and
- delivering sustainable abstractions.

We discuss these options in more detail below and in the sections that follow.

#### 3.2.1.1 Delivering ambitious leakage reductions

Our plans to reduce the volume of water that leaks from our network of pipes build on the ambitious targets set for the current planning period to reduce leakage (from a 2017/18 baseline) by at least 15% across our Cambridge and South Staffs regions. As outlined in section 2.4 on page 27 above, we have met our leakage targets in each of the first three years of AMP7 – this reflects the investment we have made to strengthen resources and in the development of new approaches to understand our water use data more effectively. We have also made more use of satellite technology and acoustic loggers to enable us to identify more leaks.

Looking ahead to AMP8, the UK Government is requiring all water companies to reduce leakage (from 2017/18 levels) by 50% by 2050, with interim targets of 20% by 2027, 30% by 2032 and 37% by 2038. For our part, in AMP8 we will go further than our WRMPs and deliver leakage reductions of 20% in our Cambridge region and 15% in our South Staffs region. We will build on existing technologies, which gives us a high level of confidence of delivery. But we will look at alternative approaches to enable us to deliver meaningful reductions in leakage over the five years to 2030 and beyond.

### How we are securing your water future...

"It's all about conserving our water resources while supporting customers with leaks on their properties and offering other help. There's lots of interactions with customers, which is great" – Ray Southall, Customer Works team

For example, we have been trialling equipment traditionally used in the gas industry that can detect voids in the ground. We have been exploring the effectiveness of the equipment in finding voids around plastic pipes that could indicate potential leaks. We have also worked with other water companies on a targeting mechanism for DMAs that uses models to explore why water flows have changed – another potential indicator of leakage.

We will continue with our proactive mains replacement programme during AMP8, to mitigate the risk of the disruptions associated with major bursts. We will also target leakage on customers' supply pipes, which accounts for around 30% of all leakage on our network. Our current supply pipe repair and replacement policy states that if we identify a leak on a customer's property, we will help to fix it wherever we can, offering an assisted leak repair service that involves:

- visiting the property, identifying the leak and making sure the property owner is aware who is responsible for the repair;
- guide the customer to the WaterSafe website to help them choose an appropriate contractor;
- provide advice to the customer on repairing or replacing the leaking pipe;
- provide advice on claiming a burst allowance; and
- carrying out the repair ourselves in appropriate circumstances.

We will continue to pursue this policy in AMP8 and will also implement a supply pipe replacement policy for our non-household customers.

Key to achieving our ambitious leakage reductions will be our universal metering programme, which we discuss in more detail in section 3.2.2.2 below.

### 3.2.1.2 Developing alternative water sources

Our Cambridge region is in one of the driest parts of the country and we have identified significant challenges regarding water resource availability and demand for water in both the short and long term. In addition, household and non-household growth in the region is forecast to be faster than anywhere else in the UK. Much of this growth is aligned the UK Government's plans for Cambridge to be "supercharged as Europe's science capital"[14]. This means we are estimating a significant increase in water demand of around 18% by 2050 from both household and non-household customers. We also need to meet significant reductions in abstractions during AMP8 if we are to deliver long-term environmental improvements and protection.

The geography in our Cambridge region is unique in that all the water we supply is taken from underground aquifers, with the vast majority of abstractions coming from the chalk aquifers that feed the chalk stream habitats that are a feature of the region. As a result of current and forecasted growth rates, there is a need to cap our abstraction licences by nearly 30 Ml/d[15] by 2030 to prevent deterioration of these water environments. This equates to more than 25% of our current abstraction levels, with further potential reductions required at the same level before 2040. When combined with future abstraction reductions, this will lead to a reduction in water resource availability in our Cambridge region of more than 50%. In addition, the changes to supply availability and demand as a result of climate change will mean that demand outstrips supply, creating a supply/demand deficit.

In the draft WRMP for our Cambridge region, we have included the following supply-side options.

- Transfer from Anglian Water's Grafham reservoir. This option will deliver up to 26 Ml/d into our Cambridge region. The scheme is dependent on the construction of Anglian Water's Grafham to Rede strategic pipeline, which has around 26 Ml/d capacity until 2040. This 26 Ml/d will be available upon the completion of the Grand Union Canal option under development by Affinity Water that will enable the company to reduce the volume of water it currently takes from Grafham (currently scheduled to be 2032). The pipeline will be constructed through our operating area and connecting into it will enable us to take advantage of this spare capacity. The cost of this scheme is currently £12.43 million, with the pipework installation and connections delivered through our AMP8 delivery partners.

[14] UK Government, 'Long-term plan for housing', 24 July 2023. https://www.gov.uk/government/news/long-term-plan-for-housing
[15] Megalitre = one million litres.

- Fens reservoir. We are working in partnership with Anglian Water to construct a new reservoir to the north of the town of Chatteris in the Cambridgeshire Fens. This option will deliver around 44 Ml/d into our Cambridge region from the mid- to late-2030s. The total cost of this scheme is likely to be in the region of £1.96 billion. (See case study on page 48 for more detail.) We have not included the Fens reservoir as an enhancement scheme in this business plan. This is because although we are confident that this is the right solution, there is uncertainty around the regulatory treatment of costs and the potential impact on customers' bills. We have published a separate document on our AMP8 plans for the Fens reservoir (see SSC03 'Fens reservoir – our approach into AMP8'). We will continue to work with all our regulators to bring this solution on line as soon as possible.

We consider these options deliver against the low and high scenarios for climate change and growth. In addition, our best value planning shows these are the best value options.

We have shared these options with customers and other stakeholders to ensure any concerns are factored into our planning, as well as to determine levels of support and future communication and engagement requirements. Overall, our customers support both options – they see water transfers as a positive way to address water needs in the region and consider the reservoir offers a longer-term solution that reduces our reliance on other companies' water sources.

### 3.2.1.3 Ensuring sustainable abstractions

In 2021 the Environment Agency published its national framework for water resources, developed from the UK Government's 25-year environment plan. The aim of the framework is to better manage water resources across England. It provides a strategic direction to water resources planning, including water users outside the water sector. It also enabled the creation of the regional water resources planning groups.

The national framework also sets out a greater level of ambition for restoring, protecting and improving the environment. The Environment Agency's modelling assumes that around 700 Ml of water a day that comes from unsustainable abstractions in England will need to be replaced by water from other sources between 2025 and 2050. To support this, the framework details some future scenarios and the scale of reductions required for each of these. It calls for a shared environmental destination – that is, the agreed level of reduction by 2050 – across each regional planning group.

The Environment Agency has explored several key scenarios – the ones explored in the greatest detail are set out in table 3.

**Table 3 Environmental destination key scenarios**

| Scenario | Name |
|---|---|
| Achieving flows to support 'Good' under the Water Framework Directive<br>Excluding uneconomic water bodies (RBMPs) | BAU |
| Achieving follows to support 'Good' under the Water Framework Directive<br>Excluding uneconomic water bodies (RBMPs)<br>Ensuring more protections for European Protected Sites (new framework for protected sites) | BAU+ |
| Achieving flows to support 'Good' under the Water Framework Directive<br>Including uneconomic water bodies (RBMPs)<br>Ensuring more protections for European Protected Sites (new framework for protected sites)<br>Extra protections for chalk streams, sensitive headwaters and sites of special scientific interest (SSSIs) | Enhanced |

The scale of abstraction reductions required to achieve each scenario increases as we moved from BAU to enhanced. For our Cambridge region, to achieve BAU+ would require abstraction reductions of around 62 Ml/d; for our South Staffs region, the figure is around 48 Ml/d.

We will do more during AMP8 to accurately determine the scale of the abstraction reductions required for delivery across both regions. We propose to carry out a series of investigations through our WINEP programme (see section 3.2.3.1 below) that will confirm the scale of the reductions required, along with the locations and a priority and timescale for delivery. These investigations will also consider the historic environment and any risks and benefits associated with the abstraction reductions required. We will work with other water companies and water users on these investigations, where appropriate, as we share catchments. The outputs of these investigations will inform our 2029 WRMPs.

Through the regional planning groups, we have also carried out detailed work with local stakeholders to develop a water resource-focused catchment plan that prioritises multiple benefits. We will work with stakeholders to deliver some of the short- and medium-term measures identified through our WINEP, such as our chalk stream restoration programme.

## 3.2.2 Reducing water demand

In December 2022 the UK Government published targets designed to aid the delivery of the Environment Act 2021. Three of these targets relate specifically to water efficiency and are aimed at delivering reductions in household and non-household water use, as well as delivering an overall reduction in the volume of water companies put into supply. These targets are as follows.

- Household consumption to be reduced to 122 l/p/d by 2038 and 110 l/p/d by 2050 (dry year targets).
- Non-household consumption to be reduced by 9% by 2038 and 15% by 2050.
- Distribution per capita to be reduced by 20% by 2038.

Below, we outline the activities we will carry out to deliver these targets. Additional detail can be found in the draft WRMPs for our Cambridge and South Staffs regions.

### 3.2.2.1 Encouraging customers to be more water efficient

In AMP8, we will invest £13.02 million to deliver demand reductions of around 3 Ml/d. Our performance will be measured and assessed through the annual review submissions made to the Environment Agency. We have shared our demand management ambitions and the details of how we will deliver this work with our customers. They support our activities and welcome our use of education outreach and communications to highlight the need to encourage behavioural change and help all customers to use water wisely.

Key to this is the need to reduce PCC levels across our Cambridge and South Staffs regions. The COVID-19 pandemic saw a rise in household consumption as a result of increased hygiene practices and more customers working from home. In addition, hybrid working is now more commonplace, which has also resulted in more household usage. This has impacted our efforts to get PCC back to pre-pandemic levels.

In 2022/23 we appointed demand management specialist Skewb to carry out a review of our PCC performance and evaluate the impact of the COVID-19 pandemic on household water use across both regions. We have worked with Skewb to develop a delivery plan for the remaining two years of AMP7, with a focus on metering, water efficiency measures and working with developers to build more water efficient homes.

At the end of the 2022/23 reporting year, PCC in our South Staffs region had dropped by 6 l/p/d compared with the previous year, despite the prolonged period of hot, dry weather in 2022. But it is still significantly above pre-COVID-19 levels. In our Cambridge region the PCC position is just 1 l/p/d above our WRMP target for the year and we are on track to recover our forecast performance by the end of the AMP. The improvement plan for the two years to 2025 will enable us to deliver an additional step change in activity and investment to ensure we meet our targets.

Insight from our customers tells us that they think this is important and that they want us to do more to educate them about their water use and about ways to save water. They also want us to share more information about:

- why this is so important;
- the future challenges that could impact water supplies; and
- the links between demand for water and the environment.

So, during AMP8 we will focus our attention on the following activities to help us address the challenges we face around reducing PCC.

- Delivering a household water efficiency programme, using a combination of partnership and home visits.
- Partnership working with housing associations, using targeted engagement programmes.
- Trialling an essential use tariff for household customers on low to middle incomes, with discounts for essential water use.
- Delivering a non-household water efficiency programme, through a combination of partnership approaches and site visits.

In addition, our universal smart metering installation programme, as discussed in more detail below will enable us to deliver more cost-efficient options.

We will employ additional resources to carry out household water efficiency audits. In addition, we will continue to work with non-household retailers to determine the best mechanism for carrying out non-household water efficiency audits and to determine who would be best place to do this (us or the retailers). We will also continue our discussions on other elements such as incentivisation to ensure successful working partnerships.

### 3.2.2.2 Delivering universal metering

A key feature of our AMP8 plans is our metering strategy, which will help us to manage water demand across our Cambridge and South Staffs regions. This builds on the commitment we made in our PR19 WRMPs to increase the number of meters across both regions.

Our current level of meter penetration stands at 53% overall. In our Cambridge region, 73% of household customers already have a water meter fitted; the equivalent number in our South Staffs region is 43%. We estimate that around 320,000 households across both regions do not have a meter and pay unmeasured charges for their water based on the rateable value of their homes.

In July 2021 the Environment Agency published its latest water stress classifications for England. Both our Cambridge and South Staffs regions have been classified as seriously water stressed. Water stress occurs when demand for water exceeds the amount available during a certain period or when poor quality restricts its use. It can cause a deterioration of fresh water resources, leading to rivers and other water courses running dry. It can also affect water quality – for example, because of pollution by organic matter. Water companies in areas of serious water stress are able to consider universal metering alongside other demand management options.

In preparation for AMP8, we are focusing on our accelerated delivery programme. In the current year we are planning to install around 15,000 meters on existing known boundary boxes. This will give us the ideal foundation on which to build in AMP8 and AMP9 (2030 to 2035).

In AMP8 we will invest more than £35 million to install around 30,000 meters a year (including 9,000 optants) to help us achieve meter penetration of around 76%. This aligns with the numbers in our draft WRMPs for the Cambridge and South Staffs regions. To deliver this part of our strategy, we will take a targeted geographic approach that considers several factors, such as social deprivation, potential for water savings and meter age. We will also invest £7.39 million to fit enhanced meter technology at all our non-household properties in both regions, which we think will deliver demand reductions in the region of 8.63 Ml/d. As with our household metering programme, this will also enable us to identify high consumption more effectively and efficiently, through reviews of continuous use, for example, as well as customer-side leakage.

In AMP9 we will aim to get as close to 100% meter penetration as possible, installing meters at the remaining unmeasured properties to complete our metering programme by 2035 and recognising the constraints presented by shared supplies. We think this will deliver water efficiency savings of 14.88 Ml/d. In line with our LTDS, we will review and update our plans before the start of AMP9, incorporating learnings from our AMP8 metering programme.

We think this approach will deliver the following benefits.

- It is a **no/low regrets approach** that will offer best value for customers now and in the future.
- It will help us to **deliver retail cost efficiencies**.
- It will give us time to **learn about, test and select the most cost-effective metering technology**.

In addition, lower levels of water use will mean we leave more water in the environment. Abstracting less water also helps us to save energy because less pumping and treatment is required.

As well as reducing our chemicals costs, it also reduces our greenhouse gas emissions and our carbon footprint. Leaving more water in the environment will also help to achieve our WFD objectives relating to river flows and improve resilience during times of peak demand.

We have tested this approach with customers and stakeholders and they have helped us to shape our plans. Our insight suggests that while the majority support metering as the fairest way to charge for water, it takes time to embed and requires building a long-term relationship with customers. In addition, they also favour not targeting areas with potential big demand savings, but to ensure that our metering programme is cost-effective and minimises any impact to customers.

### How we are securing your water future...

"In the next planning period, we're significantly increasing the number of households with water meters. As well as being the fairest way to pay for water, it also provides our customers with all the information they need to help them reduce how much water they use. This is so we can reduce the volumes we take from rivers and boreholes" – Adam Stevens, Developer Services and Metering Manager

We are mindful that there are customers across our Cambridge and South Staffs regions who oppose the idea of universal metering. We will make sure we put plans in place to help these customers through the transition, with a particular focus on supporting those in circumstances that may make them vulnerable. So, before we are due to install meters in an area, we will provide customers with detailed information packs, explaining more about the transition process and giving advice on water efficiency and payment support options. We will also engage with customers on our PSR, tailoring our support as appropriate.

We understand that some customers may be worried about switching to metered charges, even though, on average, each household that switches could save up to £100 a year. We will give customers a two-year grace period before switching. During that time, we will work with customers to help them better understand their water consumption. We will also share information with customers that shows them the potential savings of switching to a meter. Our innovative essential use tariff described in section 3.3.1.4 below will also help customers on low and middle incomes.

We have taken learnings from the CCW and Scope workshop around supporting consumers with disabilities who may not be able to reduce how much water they use. We will take every step to make sure we have a bespoke process to provide extra help when it is needed. Along with proactive identification and communication with customers on our PSR, we will also work with local charities and third-party organisations to identify further support options.

**Available meter types and capabilities**

There are currently three types of water used by water companies in the sector.

- **'Dumb' meters**, which have to be read physically – for example, by the householder. These meters only give a 'spot' reading, capturing a particular moment in time.
- **Automated meter reading (AMR) meters**, which can be read remotely – for example, by someone walking or driving by. AMR meters provide 'packets' of data, such as previous monthly reads and leak alarms.
- **Advanced Metering Infrastructure (AMI) meters**, which integrate with communication and data management systems that enable two-way communications between meter endpoints and us. Such meters can provide more granular data; they are typically read on a daily basis, although they have the potential to be read every 15 minutes.

With that in mind, we have been exploring the capabilities of the types of meter currently available in the market. In common with other water companies in the sector, our strategy is based on installing AMR meters, which are adaptable and flexible. This means we can switch them to AMI, without needing to change the meter. We consider our choice of meter is robust, adaptable and affordable, and keeps our options for the future open. It allows us to monitor technological developments and innovations, and would enable us to move to an AMI network sooner if it were cost-effective and beneficial for customers for us to do so.

## 3.2.3 Encouraging flourishing habitats

As a regulated water only company we have an important part to play to ensure we leave the natural environment in a better state for future generations, and we have ambitious long-term plans in place to deliver this. UK Government statistics suggest that if water companies do not act now to protect the environment, by 2050 some rivers and water courses in England "could have 80% less water in summer, and it will not be possible to meet the growing demands of people, industry, and agriculture"[16]. At the same time, people's expectations of their local environment have increased, with more wanting to spend time swimming in or being near to the blue spaces in their communities. This means there will be even more pressure on water companies to protect rivers, lakes, estuaries and wetlands from pollution. So, we have been challenged by the Government to ensure we always:

- provide resilient, safe and affordable water supplies (and wastewater services for the water and sewerage companies) for consumers now and in the future;
- provide a thriving and sustainable natural environment, including clean rivers; and
- deliver excellent service to all our customers.

Below, we describe how our plans will help us to deliver these wider objectives.

### 3.2.3.1 Our AMP8 WINEP programme

One of the ways we deliver our environmental commitments is through the water industry national environment programme (WINEP). The WINEP sets out the environmental requirements that water companies have to address over a five-year period to ensure compliance with environmental legislation requirements. These requirements will be different for each water company. Over the current AMP7 period, WINEP will account for around £5.2 billion of asset improvements, investigations, monitoring and catchment interventions[17].

We have developed our AMP8 WINEP programme with the Environment Agency and Natural England and are aiming to deliver a number of key outcomes, including around:

- preventing deterioration from current status;
- maintaining or restoring SSSIs to favourable condition;
- conserving or enhancing biodiversity;
- protecting/improving abstracted water quality; and
- ensuring structures meet the requirements of fish and eel legislation.

Over the five years to 2030, we will invest £19 million to deliver our WINEP programme, which includes the following key work streams.

- **Chalk stream restoration programme.** We will implement river restoration measures over a ten-year period to improve brown trout habitats in seven water bodies in our Cambridge region, including the River Granta, Mill River, the River Mel, Vicars Brook and Cherry Hinton Brook. This follows investigations carried out in the current AMP, including desk studies, site walk overs and habitat surveys. These surveys identified the current extent of brown trout habitats and the potential to create or enhance such habitats in the future. Potential solutions include channel realignment, reinstatement of coarse river bed material, narrowing of river channels, river bank re-profiling, and tree planting and management. This will help to improve the ecological status of the seven water bodies that make up the programme.

[16] 'Water industry national environment programme (WINEP) methodology', Defra, May 2022. Water industry national environment programme (WINEP) methodology - GOV.UK (www.gov.uk)
[17] Ibid.

- **Eel screening.** The River Severn, which feeds into Hampton Loade water treatment works in our South Staffs region via Chelmarsh reservoir is home to a variety of fish species and the European eel. This means there is a legal requirement on us through the Eels (England and Wales) Regulations 2009 to mitigate the risk of juvenile fish or eels becoming trapped in Chelmarsh reservoir. Our preferred solution, as agreed with the Environment Agency, is to install eel screens at the intake pipes at Chelmarsh and carry out a 'trap and release' programme each year for mature eels already in the reservoir.

- **Invasive non-native species (INNS) biodiversity implementation.** Under the Natural Environment and Rural Communities Act 2006, we are required to prevent habitat deterioration by reducing the risk of spreading INNS and mitigating their impact. Our preferred solution is to work in partnership with other water companies to develop the techniques and approaches needed for INNS surveillance. The aim is to provide a standardised and costed set of techniques to create a national surveillance programme at high-risk sites. At a company level, we will put in place a programme of monitoring and management at sites where INNS have previously been identified. We will also implement awareness-raising campaigns. Investigations carried out during the current AMP will inform this programme.

In addition, we will carry out investigations at the Cam Washes and Sawston Hall Meadows protected sites in our Cambridge region, following concerns raised by Natural England. And we will carry out investigations to help us develop options towards the delivery of our wider environmental destination objectives, as requested by the Environment Agency. This includes developing solutions to address environmentally unsustainable abstractions at a water resource zone or catchment level. These solutions will feed into a list of sustainability changes, informed by AMP8 investigations, which will be included in future WRMP and WINEP schemes.

### 3.2.3.2 Biodiversity improvements

We will continue to carry out biodiversity improvements across our Cambridge and South Staffs regions during AMP8. This includes continuing to run our successful PEBBLE[18] biodiversity improvement fund and SPRING[19] environmental protection programme.

- **PEBBLE biodiversity fund.** Each year, we make grants of up to £10,000 available to projects that seek to create, improve or restore a local habitat, and that also deliver community benefits. In recent years, we have made grants available for a range of projects, including the creation of community gardens, tree and hedge planting projects, and the improvement of wetland habitats.

- **SPRING environmental protection programme.** We make grants of up to £15,000 a year available (£10,000 for capital projects) to arable and livestock farms for schemes that aim to improve water quality at a catchment level in our South Staffs region. The grants are made for infrastructure improvements and also to invest in biodiversity options to increase the natural capital of farmed land. In recent years, we have made grants available to trial cover crops, for farm yard improvements and to plant wildflower buffers to increase biodiversity.

In addition, we will use the WINEP investigations carried out during the current AMP to inform the implementation of other biodiversity improvement measures, subject to the operational conditions at individual sites. These measures include:

- woodland management and hedgerow planting;
- rainwater harvesting;
- 'green' roofs and walls on smaller pump houses, as appropriate;
- butterfly banks;
- tree planting and orchard creation;
- water course enhancement;
- installing bird and bat boxes; and
- creating habitats for insects, amphibians and reptiles.

In addition, at the Blithfield site in our South Staffs region, we will carry out work to map veteran trees across the estate, identify trees of interest and carry out species surveys. We will also develop and implement a management programme to support tree longevity. This will help us to deliver biodiversity benefits now and in the future.

[18] PEBBLE: Projects that Explore Biodiversity Benefits in the Local Environment.
[19] SPRING: Slug Pesticide Rethink – Ideas for Nurturing Growth.

**Securing your water future – ensuring sustainable water supplies with a new reservoir**

We are working in partnership with Anglian Water to construct a new reservoir and associated treatment and supply infrastructure in the Cambridgeshire Fens that will secure water supplies to customers in our Cambridge region for future generations. The reservoir will provide much-needed winter water storage, enabling us to make the most of wet weather so that we can use the water during dry periods.

The new reservoir will help us to meet the twin challenges of climate change and population growth. In addition, it will mean less water is taken from environmentally sensitive water sources – specifically, the chalk aquifer that feeds the rare chalk stream habitats that are a feature of our Cambridge region. So, it will also help us to protect and enhance the environment.

We have carried out a detailed site selection process to identify the most appropriate location for the reservoir – identifying an area to the north of the town of Chatteris. This location performed best against the key factors we assessed. We also think it provides potential opportunities to deliver wider benefits to the regional economy and neighbouring communities, as well as creating a place where we can bring water, people and nature together.

This means creating wetlands to encourage biodiversity and natural places for people to explore, alongside new recreational and educational activities. It also means creating new jobs and providing opportunities for local businesses and tourism.

We have already engaged customers and stakeholders through a first consultation phase, which ran from October to December 2022. This focused on our preferred location and early concept designs. Additional consultations will be carried out in 2024 and 2025. We are using the feedback from the first consultation to develop our plans further.

The new reservoir has been recognised as a strategic regional asset. This means it qualifies as a Nationally Significant Infrastructure Project (NSIP). As a result, we will have to apply to the Planning Inspectorate, which acts on behalf of the Secretary of State for Environment, Food and Rural Affairs. The Planning Inspectorate will consider our application over a six-month examination period, after which it will make a recommendation to the Secretary of State who will then make a final decision as to whether consent for the project to go ahead is granted.

The new reservoir will have a total volume of 55m$^3$ – this is enough water to supply customers in out Cambridge region with around 44 million litres of water a day. Our plan is for the reservoir to be fully operational by the mid- to late-2030s.

## 3.3 Exceeding our customers' expectations

**Our customers**

We will innovate to exceed customers' expectations of our service, **end water poverty** and make sure help is always available.

**All our customers are important to us. We are proud of our local roots and the relationships we have with all our customers across our Cambridge and South Staffs regions. We will continue to build on this for the future, ensuring we put customers at the heart of all our decision-making and empowering our people to always deliver great customer service.**

The focus of our plans for AMP8 are to ensure we always provide our customers with:

- a tailored experience and seamless services;
- increased choice and flexibility in how they engage with us;
- a new 'pay in your own way' approach to support affordability, aligned with CCW's independent review of affordability;
- a 'help when you need it' approach to vulnerability, with a range of tailored support options; and
- a level of support that goes 'wider than water', building on the work we have carried out with third-party organisations during the current AMP.

And because we believe the channels customers use to engage with us matters to them and that customer journeys need to be made for all, we are investing in multiple channels – from a sector-leading approach in the digital space to bolstering our community presence.

### 3.3.1 Keeping water bills affordable

We recognise the need to place affordability at the heart of our customer strategy for AMP8. The ongoing cost-of-living crisis means it is more important than ever to keep our water bills affordable and to provide help and support to all those customers who need it. We want to make sure we really understand the challenges our customers are facing. So, we have aligned our affordability strategy with CCW's affordability review and have ensured that we have addressed each of its recommendations within our approach.

We have also worked closely with CEPA, a leading economic and financial policy consultancy and data insight provider, to help us to truly understand the customer demographics in our Cambridge and South Staffs regions. CEPA has worked with us to create a bespoke data model with detailed information to support our understanding of the levels of water poverty across both regions.

Using a 5% bill to income ratio, data shows that our current water poverty level is around 4% of all customers, and will rise to more than 6% by 2027/28. So, we have ensured our plans

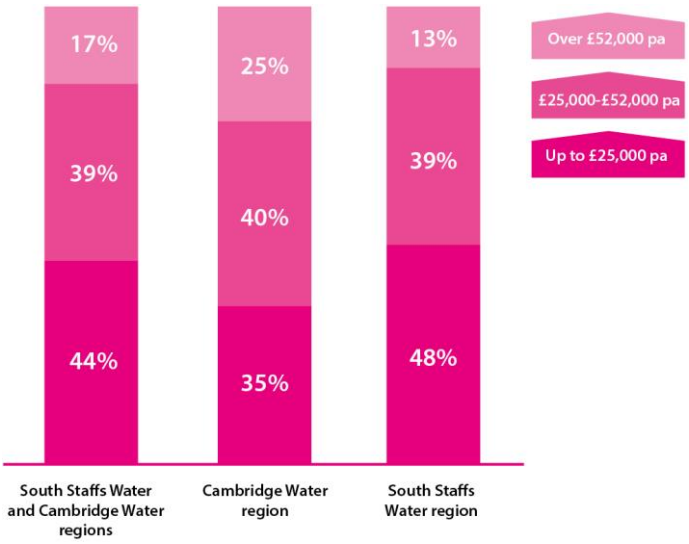
focus on affordability and on making sure we support those customers who need extra help. We have also used this data to drive our geographic targeting of where support is needed the most. For example, the Sandwell local authority area in our South Staffs region has the highest levels of water poverty – with 17.6% currently, and rising to 25% by 2027/28.

### How we are securing your water future...

"Home visits are a part of our affordability journey and we will link in with energy companies to ensure support is provided in a holistic and meaningful way" – Heidi Knapton, Director of Customer Delivery

We have overlaid this work from CEPA with income data from Impact, one of our customer research and insight supplier partners, and with data from our customer promises tracker. This suggests there are significant differences between our Cambridge and South Staffs regions when comparing household incomes. Our South Staffs region has a higher number of residents with an income of up to £25,000 a year (48%), compared with our Cambridge region (35%). This is illustrated in figure 1 below.

**Figure 1 Household income – three-year average 2021 to 2023 (%)**




Impact has also helped us to identify our most deprived communities, so that we can proactively target our communications to provide the best possible support. Third-party research of open data sources suggests that almost one-third (32%) of all households within postcodes in the South Staffs region are in the most deprived deciles (deciles 1 and 2). This is in sharp contrast to our Cambridge region, where just 1% fall within the same deciles, while almost three-quarters (72%) of households within postcodes in the Cambridge water region fall into the more affluent deciles. We have also found significant variations within each region, with significant pockets of deprivation within the Dudley, Sandwell and Walsall local authority areas in our South Staffs region, for example, compared with the relative affluence of the Lichfield, South Derbyshire and Sutton Coldfield local authority areas.

We will use this data to target our community activity within these areas and direct our customer communications to ensure we are being proactive about sharing our support options. We will also continue to collaborate and engage with third-party organisations such as Citizens' Advice and debt support groups to act on our behalf in supporting customers who may be struggling to pay their water bills.

We currently offer the following financial support options for customers.

- Our **Assure social tariff**, which is available to customers whose household income is less than £19,050 a year. Eligible customers receive a 60% discount on their water bills in the first year and a 40% discount in the second.
- Our **Assure Assist tariff** for customers who have no income coming into the home and who have applied for Universal Credit. In the first year, eligible customers receive a 100% discount for eight weeks, followed by a 60% discount for 44 weeks. The discount in the second year is 40%.
- The **WaterSure tariff** for customers who have a water meter and receive income-related benefits, and who need to use a lot of water – for example, because of medical reasons. Customers on WaterSure pay for the water they use up to a fixed maximum, which will be no higher than the average household water bill.
- **Payment breaks**, which are available for customers who may need a short break from paying their water bills – for example, because of a significant temporary change in financial circumstances. We currently allow payment breaks of up to three months.
- Our new **'text to pay' service**, whereby we text eligible customers, prompting them to make a payment as a way of encouraging regular bill payment habits.

We also have a Charitable Trust, which is a registered charity set up to help customers facing genuine financial distress with the cost of meeting their water bills. We are proud of the work our Charitable Trust does to support customers who may be in debt. The Board of Trustees meets every three months to review the number of customers supported and to ensure the right decisions are being made for those customers who need the most help.

We recognise there is no 'one size, fits all' approach to affordability support and we want to make sure we can cater to all customers in a variety of different scenarios. We have taken on board Water UK's response to the call for evidence for the independent review of affordability, which highlights the importance of water companies working closely with partner organisations, including CCW, the debt advice organisation StepChange and the Money Advice Trust.

We also recognise and understand the levels of digital deprivation across our South Staffs region in particular. We were the first company in the water sector to open a community hub. We have worked hard on this initiative, hosting many sessions every week, including a 'knit an natter' group that meets every Monday and our regular 'here for you' events held in partnership with Citizens' Advice.

We want to make sure that every customer is aware of the support available to them and that this can be accessed with ease. We are proud of the work we have already done to support our customers through third-party organisations and we want to enhance this as part of our future planning. So, we will:

- continue to work with third parties to share clear information about the support we offer. As an example, we have been sharing bill information with a food bank in Burntwood in our South Staffs region to enable it to provide holistic support to customers on our behalf;
- build on our programme of customer communications – using multiple channels, including post, text and email;
- create a digital application process for our Assure social tariff that will remove the need for printed forms and postage as a way of increasing ease of access;
- deliver a digital financial calculator that can help customers learn more about the financial help that is available;
- increase our face-to-face community support home visits, recognising that customer channel of choice counts; and
- employ a data driven/demographic approach to the geographic targeting of support, taking into account things like meter penetration, levels of customer contact and deprivation scores.

We also acknowledge that some customers can find it difficult to understand and interpret our water bills. So, we will redesign them – considering every aspect of the content and layout in the round. We will show, at a glance, what is owed, with clear information that is prominent and easy to digest. We will also look to create an online interactive bill, where customers can select sections to learn more, click to pay and access a 'talking bill', if required.

### 3.3.1.1 Pay in your own way

We understand the importance of giving customers greater choice and control over their water bills and are continuing to align our approach with CCW's affordability review. We will continue to invest in technology to support this approach to give our customers more options, including:

- increasing the payment choices available, such as using QR codes on bills and ApplePay;
- implementing a new 24/7 self-serve approach, enabling customers to make payments and changes to their accounts at a time that best suits them;
- offering flexible options to spread payments across a 12-month period to suit customers' individual circumstances; and
- implementing an online, sliding scale flexible payment tool, giving customers who want to self-serve and spread the cost of their water bills over 12 months the opportunity to do so in a discrete way.

We will also take a proactive approach to identifying those customers who need support. So, we will use credit reference agency data to proactively identify customers who may be struggling financially. This will enable us to reach out to them, particularly at the point when they onboard with us. We want to be able to reach out to customers and provide them with help and support right from the start. From proactive payment reminders to support package awareness, we will tailor our communications to customers' individual circumstances to give them the best possible helping hand.

To ensure we are supporting the right numbers of customers in the right way and at the right time, we will develop an affordability and support performance dashboard. This will enable us to view all our support programmes in one place – from the number of customers supported by our existing tariffs to those on innovative new tariffs or those reached by visits in the community. Over the course of AMP8, we will help around 60,000 customers a year with our financial and other support packages.

### 3.3.1.2 Reducing levels of bad debt

We understand that levels of bad debt can impact the cost of bills for all customers. So, we want to make sure we reduce this as much as possible. For customers who are struggling to pay their water bills, we will provide the right support, ensuring we make this as easy and as stress free as possible and have implemented a collections strategy to help us.

- For customers who have always paid us on time, we will make sure payment methods continue to be accessible and increase the options to include different ways to pay. We will continue to analyse data to proactively spot any early warning signs of changes in circumstance and link this to our customer engagement and communication plans.

- For customers who are in the early stages of not being able to pay, we will use data to create customer segmentation and bespoke campaigns to provide support. We will also use data from credit reference agencies and ensure it is utilised at the point of customer onboarding to give us a comprehensive understanding of the levels of customer support that is required.

- For customers who can afford to pay but who choose not to, we will continue working with debt collection agencies to recover the money we are owed. Our Aptumo billing system will make this easier by automating some of our manual processes, giving our people more time to spend on supporting those customers who need the most help.

We are also committed to maintaining an accurate view of void properties across our region. Data from the Office for National Statistics (ONS) suggests that this should be in the region of 22,000 properties (2.6% of our total household property base). We recognise that our current number of void properties has

increased over recent years, and we have a structured plan in place to reduce this figure during AMP8. We have created a robust programme of work to help us reach and maintain this target. This includes:

- carrying out data validation;
- working with third-party support to help identify potential void sites;
- developing an app to help our field-based teams validate the void/occupied status of properties across our Cambridge and South Staffs regions;
- blending our internal datasets to ensure site-based void checks become a BAU work stream across all field engineer work schedules;
- making sure meter readings are taken at least every six months for all void properties to check for new occupiers; and
- partnering with energy companies to share datasets on usage.

We also recognise that a robust occupier integrity strategy is also about reducing the number of 'new' void sites. To ensure we have the right occupier details recorded on our systems right from the start, we will:

- create welcome packs and work with third-party organisations, such as housing associations, so that we can be sure of capturing the correct details upfront; and
- introduce an incentive scheme for developers, encouraging them to share accurate data with us in a timely manner.

In addition, we will create a bespoke process for customers who live in properties that we believe to be void, making sure they are supported to develop regular bill-paying habits. We will evolve these processes to create a longer-term strategy of maintaining an accurate view of occupier integrity. Although we will start a number of these work streams in this AMP, we recognise the need for a sustained and effective process. This is why we will take a phased approach across AMP8, gaining momentum as our plans and the availability of third-party become embedded.

### 3.3.1.3 Providing support for customers in vulnerable circumstances

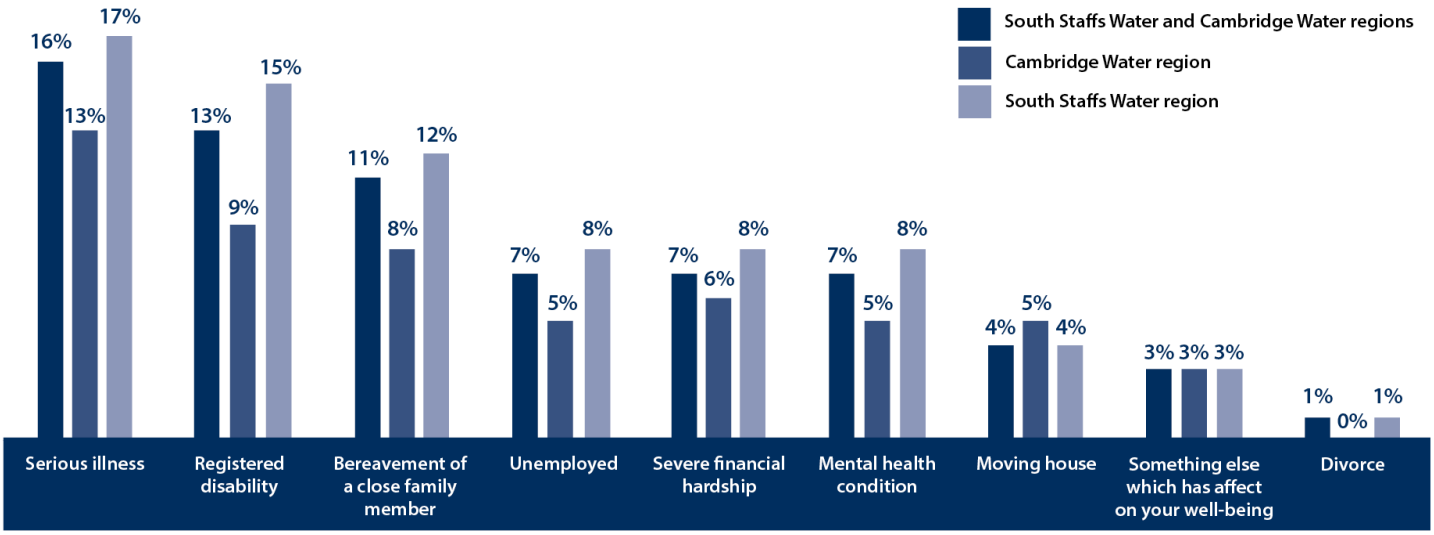
In its vulnerability focus report published in 2016, Ofwat defined a 'vulnerable' customer as:

**"A customer who due to personal characteristics, their overall life situation or due to broader market and economic factors, is not having reasonable opportunity to access and receive an inclusive service which may have a detrimental impact on their health, well-being or finances."**

In its draft vulnerability guidance published in July 2023, Ofwat confirmed that this definition is still relevant and useful.

We value the importance of understanding the current volume and profile of vulnerability across our Cambridge and South Staffs regions. Impact has reviewed a range of insights to help us understand more about customers' personal circumstances and how that could make them vulnerable. This insight tells us that the highest reported negative personal circumstance is serious illness (16%), with more customers in our South Staffs region reporting that they have experienced this (17%) when compared with customers in our Cambridge region (13%). Other negative personal circumstances that could cause vulnerability are shown in figure 2 below.

**Figure 2 Potential causes of vulnerability**




Source: South Staffordshire Water customer tracking (Cambridge and South Staffs regions), 2022/23.

We want to make sure we are providing our full support to customers who may need extra help and we recognise that this should go beyond our PSR. We also recognise that there can be overlaps between customers' needs and the help provided. For

example, customers who need extra financial help could be negatively impacted by a poorly communicated message around debt. We have already carried out a considerable amount of work in this space, flexing our service and providing extra help to those customers who need it. During the current AMP, we have:

- broadened our range of communication channels to suit different customer needs – for example, we offer large print bills and we have an alternative language line;
- consolidated our supply impact process to ensure we provide bottled water to all medically dependent customers in the event of an unplanned incident; and
- created a password scheme to enable us to confirm that we are who we say we are when calling at customers' homes.

Over the course of AMP8 we will build on the support we provide to customers who have a serious illness or registered disability. This includes:

- proactively communicating with customers to make them aware of the additional support we offer;
- partnering further with charities such as Macmillan, Dementia UK, the British Heart Foundation and Kidney Care UK to flag up other support that may be available; and
- during unplanned incidents, making sure all customers on our PSR with a medical condition or registered disability also receive proactive tailored communications as well as receive bottled water supplies.

And because we recognise that vulnerability can be transient in nature, we are developing a 'help when you need it' programme, including:

- increasing our proactive communications to customers on our PSR;
- making the process for applying for our Assure social tariff even easier;
- building on our engagement with third-party organisations, including housing associations, to ensure they can act on our behalf, with the right messaging and tools;
- carrying out proactive account health checks to make sure customers are on the best tariff for them;
- siting new meters in locations that are accessible to customers;
- offering Surestop remote stopcocks for customers who may need help to turn off their water supply;
- designing a discrete sliding scale of payments to support customers to pay what they can when times are tough;
- providing home visits to customers who wish to speak to us in person and who may not be able to attend one of our community events; and
- partnering with JAM, an organisation that provides digital or physical cards that allow customers with a hidden disability or communication barriers to let us know they need extra time and understanding in a private and straightforward way.

In addition, we will ensure that every customer on our PSR receives a welcome pack with a clear explanation of the support they can expect to receive from us. This will include a more forensic examination of individual meter readings to identify customers who might be self-rationing water to save money. And we will offer a joined-up approach with other organisations to help us identify customers who might need our support, but who have not reached out to us.

We think that working with third-party organisations will encourage the co-creation of initiatives and ideas around supporting affordability throughout our communities. We will build on our engagement with local housing associations and health care associations to link in with our home visits support. This will enable us to continue establishing partnerships to support our customers in the best way possible.

We understand that reaching out for extra help is not always easy, particularly for those customers who may have experienced a loss or bereavement. So, we will create a 'tell us once' approach and join forces with other organisations to share data and reduce the need for customers to have to share difficult personal information frequently. We will also put in place a bereavement line, run by empathy-trained advisors, so customers can receive tailored support and understanding at the most difficult of times. And to take this support further, we will link in with charities such as Age UK and ReEngage to help tackle loneliness across our Cambridge and South Staffs regions.

We want our people to understand the range of vulnerability and how best to support those customers who need extra help. With this in mind, we will invest in a training programme with a focus on different customer circumstances and the best ways to provide support. To ensure this training is fit for purpose, we will seek to engage representatives from different customer groups to help shape our plans around vulnerability. We want continuous improvement to be a key theme for us and testing or trialling new initiatives with these customer representatives will help us to do this. Our overall aim is to develop and implement a vulnerability charter for the business, which all our people will be encouraged to sign.

During the current AMP we have taken steps across our operations to support customers in vulnerable circumstances who experience supply issues. We make it a priority to provide customers who are medically dependent on water with alternative supplies. We will continue to build on this approach, proactively identifying a wider range of customers who may need our support, including those who are struggling financially and who may not be able to afford to buy bottled water in the event of supply interruptions.

To truly understand how well we are performing in delivering services for customers in vulnerable circumstances, we will develop an internal metric, similar to a customer satisfaction (C-SAT) score, solely for customers on our PSR. This will enable us to see what is going well and where we need to make improvements. Our customers' opinions matter to us, so being able to measure this in a way that is tailored to these groups of customers is critical. To build on this approach even further, we will identify complaints from our PSR customers through a separate channel and ensure we are providing tailored support.

We think this will make it easier for customers to tell us that we need to do something differently.

We will also commit to establishing and leading an Affordability and Vulnerability Panel and host a Midlands Region Affordability Summit in our South Staffs region. We think that bringing people together in a holistic way like this is a key enabler to supporting all our household customers.

We discuss our vulnerability strategy in more detail in SSC16 'Vulnerability strategy – help when you need it'.

**Securing your water future – removing barriers to accessing support**

We want to make sure that all our customers can access our support options and understand that, to improve this, there are some barriers that we need to remove.

We have listened to the learnings outputs from CCW and Scope's 'Helping those hit hardest by the cost-of-living crisis' research, which identified customer doubt around eligibility as the most common barrier to accessing support. We will address this by adopting far-reaching communications strategies and proactively identifying eligible customers through our internal data and our partnerships with third party organisations.

Other barriers can include a worry about administrative burden and a discomfort around assessment processes. So, we will take action to simplify all our support processes – and ensure customers in the most vulnerable of circumstances become automatically eligible for support.

### 3.3.1.4 Trialling an innovative tariff for low- and mid-income households

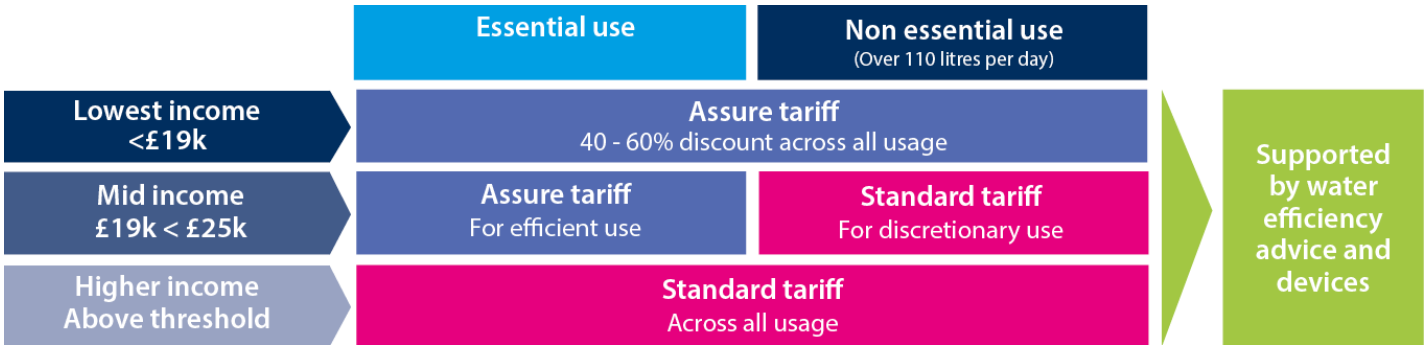
For AMP8 Ofwat has amended its charging rules to enable water companies to trial different charges based on consumption. It is encouraging all of us to trial innovative charging structures to support the affordability challenge arising from the cost-of-living crisis and to address the need for higher bills to deliver sustainable infrastructure programmes. CCW also supports this approach and has asked water companies to develop innovative tariff trials in their charges for 2024/25.

To enhance our affordability strategy, we will trial an essential use discount for customers who are above the income threshold for our Assure social tariff but who are still struggling to pay their water bills.

Recent data from Citizens' Advice shows that 18% of customers it has supported who are experiencing water and sewerage bill debt had household incomes of between £18,000 and £24,000 a year. These customers are often squeezed the most as they are not eligible for other forms of financial support. This is why we have chosen to target this group of customers for the trial.

The tariff will offer discounts for water use up to a bespoke threshold of household consumption based on the number of occupants, with standard charges applying for discretionary use above this level. Customers on the trial will also be supported with additional water efficiency advice and devices, so they can make further savings on their water bills through behavioural changes. We have engaged with customers ahead of the trial to help co-develop and test the level of support for our approach. We illustrate our approach in figure 3 below.

**Figure 3 Our essential use tariff for low- and mid-income customers**




The sample for the trial will comprise metered customers across our Cambridge and South Staffs regions. We envisage there will be a small number of customers signing up for the trial over the 2024/25 billing period.

Our essential use discount tariff trial has three key objectives.

- It will provide additional support for customers who are struggling to pay their water bills.
- It will enable us to test a rising block tariff approach, with tailored thresholds based on occupancy.
- It will measure the impact on consumption behaviour – that is, essential versus non-essential use and associated mental and physical wellbeing.

As well as aligning with Ofwat's guidance, we think the tariff will provide a number of benefits for customers – for example, it will provide extra support for those who are struggling to pay. We will guarantee that customers who join this trial will always

get a discount on their typical water bill. If the trial is successful, we already have the infrastructure, processes and tariff structure in place to roll out this programme at the start of AMP8 to enable us to support even more customers.

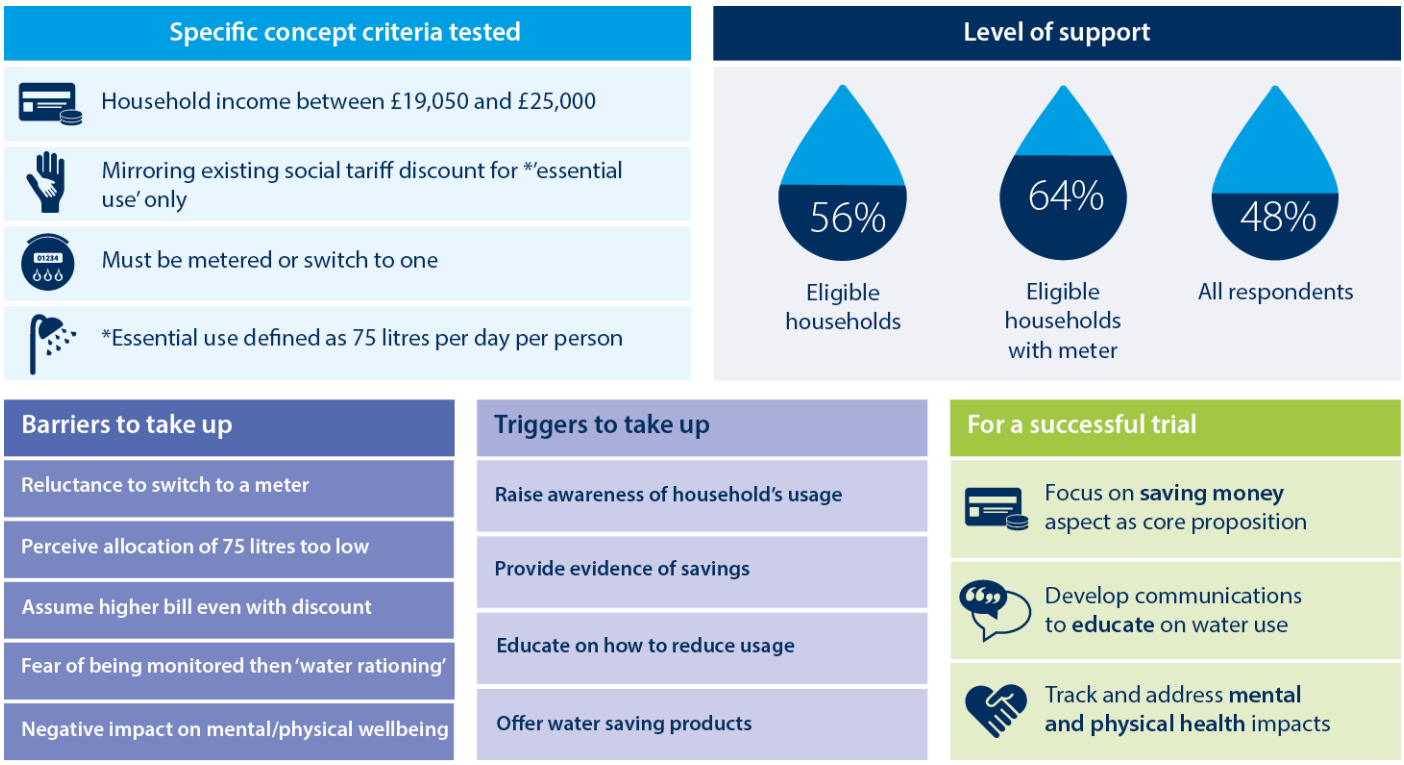
In addition, we think it will encourage customers to place more value on the water they use. And we think it will deliver benefits for us in terms of its compatibility with our community engagement strategy and our long-term environmental ambitions.

Key to this trial is ensuring the wellbeing of our customers. We will take steps to make sure participants do not feel they have to restrict their essential water use. We recognise that some customers with particular medical conditions may not be able to reduce their consumption. So, we will take steps throughout the trial to understand particular circumstances and tailor our support appropriately. We will work with third parties and local organisations such as Scope to proactively identify these customers and provide extra help across a variety of platforms.

We understand that customers may want further support to help them save water, which is why we will invest in 11,000 'smart home visits'. We will take learnings from the energy sector's Green Doctor scheme and will collaborate to provide holistic support when it comes to making water efficiency savings.

We worked with our partners Qa Research to understand more about customers' views of our innovative essential use tariffs. We discuss this in more detail in section 4.4.5 and summarise customers' views in figure 4 below.

**Figure 4 Customer views and feedback on our innovative essential use tariff**




## 3.3.2 Offering customers choice

We recognise that different customers want to engage with us in different ways – we know from our research that not everyone wants to use digital self-serve options, preferring to interact with us face to face or by phone. So while we will continue to invest to improve our digital service offering for those customers who want this, we will also continue to invest in our telephony and face-to-face services.

During AMP8 we will invest £3 million to deliver a sector-leading approach to customer service, with a fully integrated 'one platform' technology that will transform our approach to providing what we are calling our '360° view of the customer'. Having this level of system integration will mean that all our customer-facing teams will have a complete view of customers' needs to provide an in-the-moment tailored customer journey. AI analytics will provide an overview of themes and previous interactions to enable us to deliver this bespoke, tailored approach. Using this platform will enable us to invest in our future and reduce our cost to serve in the longer term, while transforming our customer service approach. We illustrate our 360° view of the customer in figure 5 below.

**Figure 5 Our 360° view of the customer**


This is because we recognise that we need to do more for those customers who are, for whatever reason, time pressed and who would prefer to engage with us through online self-service offerings. We will increase our digital services to introduce more interactive digital channels, such as WhatsApp and video calling. In addition, we will use our Aptumo and Maximo billing and works management systems to develop and implement a single platform view of all customer contact so that we can seamlessly service customers across multiple channels with one interaction.

We will also enhance our systems to give our customer-facing teams the tools they need to be able to resolve customer queries first time, all the time. Every contact a customer makes with us will be linked and available for all teams to view, enabling us to tailor our services even more to individual customer circumstances. This is essential to our drive for efficiency, to encourage a seamless movement across channels for customers who wish to do this and to keep them at the centre of all our interactions regardless of channel, time of day or which part of the business they last interacted with.

As well as providing new self-service channels, our digital investment will also include an interactive voice response (IVR) option, which can make it easier for customers to engage with us. And it will enable us to simplifying some of our work flow processes, reducing our cost to serve and increasing our speed of response to customers. We will do this by automating a suite of items, including:

- our quality checks across all communications channels;
- consumption monitoring and the associated customer communications; and
- identifying customers who may be eligible for our financial or other support packages, such as our Assure social tariff.

The technology in which we will invest will be an enabler for the future – it will support us in proactively monitoring customer interactions to enable us to identify those who may be eligible for our PSR and prompt us to provide tailored support. It will also give us the ability to predict the financial and personal wellbeing of every customer at each stage of their conversations with us. And it will enable us to design

personalised journeys for each customer type, delivering the right message and level of agent resource at the right time.

Recognising the importance of customer choice, we will use this technology to make sure customers who prefer to speak to us directly will be able to do so quickly and seamlessly, without having to select these options each time. This will reduce the effort needed to get the advice they are looking for in the way they want to receive it.

In addition, we will invest in real-time performance monitoring of these extra platform services so that we can respond to queries quickly and flex our resources and services accordingly. And we will invest in AI to enable an automated, online engagement forum for customers who wish to engage with us in this way and use automated processes to report and pinpoint leaks.

While we understand that some customers welcome online self-service engagement, others prefer to use more traditional communication methods. We are also aware that across our Cambridge and South Staffs regions we have areas of digital deprivation. While data for this is difficult to source, the ONS' annual Labour Force Survey measures the percentage of the adult population that does not use the internet. Overlaying this with data from Eurostat's Nomenclature of Territorial Units for Statistics (NUTS)[20] gives us a good indication of roughly what proportion of the population could be considered digitally deprived.

Impact data suggests that digital deprivation in our Cambridge region stands at about 7%, which is roughly the same as the rest of England. However, within the Sandwell local authority area, the figure is around 15%. Our award-winning community hub in Wednesbury helps to support this gap, providing face-to-face services and help for those customers who need it. We are rightly proud of our strong community presence and local relationships, and we will continue to invest in these. We will work to improve the digital technology in our community hub to support customers who may want to use these channels, but who are not able to do so at home. We will also support digitally deprived hotspots by making sure our community strategy includes a real focus on these areas, with digital hubs available for customers who wish to use technology to access our services. For more information on our community strategy, see section 3.4 below.

## 3.3.3 Providing a proactive customer service for household customers

A key feature of our AMP7 plan to date has been to create a 'right first time' approach for all our household customers. This has resulted in an improvement in the experience they have with us. In 2021, for example, we set up our Proactive Customer Operations Centre, combining the teams that process and schedule the work for our field-based people and aligning them more closely with our customer contact centre and our control room, which constantly manages our water network. Every role within these teams has been re-shaped to ensure customers' needs and expectations are always at the heart of everything we do. Our work in this area was recognised with the 'Customer Initiative of the Year' award at the 2022 Water Industry Awards.

### How we are securing your water future...

"We use a whole team approach to deliver an effective outcome for all our customers. On many occasions, for example, our Energy and Carbon team have helped our Service Recovery team, providing technical back up and clear explanations for our customers" – Helen Frances, Customer Support team

Adopting this approach is delivering clear benefits for us – in 2021/22, we were ranked 4th in the water sector overall for C-MeX, the regulatory measure of household customer experience. And although our performance in this critical area dipped in 2022/23, we are confident that we will hit our upper quartile target as part of our AMP8 plans. We will continue to invest in network calming projects, using loggers installed across our Cambridge and South Staffs regions, to alert us to any changes in our network before they impact our customers. This is alongside our plans to automate messaging alerts from within our works management system, so customers will receive live updates if supplies are affected. We want to make sure our customers are always in the loop if their water supply is impacted by any network changes, such as burst mains. So, we will improve our processes to ensure proactive and timely updates, every time.

### 3.3.3.1 Taking a customer-centric approach

As outlined above, we want to create meaningful customer journeys, making sure we offer great service through multiple channels. We also want to ensure customers can choose the best journey for their circumstances at any given time. This means:

- building on the work we have carried out during AMP7 to create a customer-centric culture across our business;
- making it easy for customers to access our services, including offering self-service options for those who want them and addressing digital deprivation across our Cambridge and South Staffs regions;
- taking a holistic approach to affordability;
- supporting customers who find themselves in circumstances that could make them vulnerable; and
- demonstrating leadership by trialling an innovative tariff to help low- and middle-income customers who are struggling to pay their water bills, but who do not qualify for our current social tariff offerings.

We understand the importance of our people in generating great customer service. We have taken into account CCW's customer-

[20] The Nomenclature of Territorial Units for Statistics (NUTS) classification is a hierarchical system for dividing up the economic territory of the EU and the UK for the purpose of collecting, developing and harmonising European regional statistics and the socio-economic analysis of different regions.

centric culture review and are keen to align our business to its recommendations. We agree with CCW that trust is the "ultimate currency" in all our relationships with customers, and that we have some work to do to build more trust with them. This includes creating a customer strategy that is underpinned by the contributions of our people, with a focus on organisational psychology, employee wellbeing and a hands-on change management experience across our teams. We consider that a key part of creating a customer-centric culture is to put the customer at the heart of our peoples' roles. As such, we have:

- connected our people with customers, by sharing their stories at meetings of all levels across the business, including Board meetings;
- created cross-departmental customer champions; and
- embedded customer service within our reward and recognition process.

During AMP8 we will extend this approach across the whole business to ensure we are combining our customers' experiences with those of our people and our brand for a sustained cultural change. We will also provide meaningful customer service training across all teams, not just those that are customer facing. To achieve this, we will review our organisational structure to ensure clear, functional team objectives, with a shared vision of customer experience that links directly to our values of equality, diversity and inclusion; excellence in service; responsibility; and trust.

In addition, we will make sure we cater for the needs of our customers for the longer term, recognising that monthly statistics may not give the full picture of the actions required. This means bringing the customer to life at each stage of the employee lifecycle, by talking about customer experience across job descriptions, job interviews, induction programmes, team meetings and one-to-one conversations.

We will use technology to collect satisfaction feedback at every point of the customer journey across all contact channels, creating dashboards to monitor and report trends, and to assess and improve the conversations we have with our customers every day. Using AI machine learning to run sentiment analysis, we will feedback to our teams to ensure we can resolve any dissatisfaction for our customers in the moment.

From our C-MeX results, we understand that we need to do more in our digital service space and also go the extra mile when it comes to queries about low water pressure. So we will create a new internal target around the number of low-pressure complaints we receive to help us reduce levels of customer dissatisfaction.

### 3.3.3.2 Using customer segmentation to provide a bespoke service

Customer segmentation is about dividing our customers into different groups that are similar in specific ways, such as age, household situation or how they interact with us.

We aim to meet the needs of all our customers and provide them with a high level of service. But we recognise that they are not all the same and we cannot deliver against their different needs if we do not take these differences into account in our plans. By segmenting our customers into groups, it brings us closer to being able to personalise our offering and meet those customer needs. This is something they have told us we need to do.

During 2019/20 we worked with one of our research partners, Turquoise Thinking, to develop a transactional segmentation of our household customer base. There were three main stages to this project. During the first stage, we developed a segmentation model based on the data we hold about our customers – for example, how they contact us and how often, how they pay their water bills and which of our services they use. The model is 98% accurate in allocating a customer to a specific segment.

The second and third stages involved in-depth interviews with customers in each of the segments to understand more about their preferences around the motivations behind their behaviours and how they preferred to interact with their household suppliers, including us. This was followed by a robust quantitative study to validate the findings and enhance our knowledge of the segment profiles.

We have summarised the customer segments in table 4 below.

**Table 4 Customer segments overview**

| Segment | Segment overview |
|---|---|
| 1 | Youngest segment overall and significantly more likely to live in higher income households. Majority not in debt with their water bills.<br>Tech savvy and comfortable using any device online service (e.g. apps, smart phones, web chat) to manage their finances.<br>Value ease and convenience and like to use online services that make it easy for them to manage their lives. Heavier users of our digital services and most likely to pay by direct debit, with most paying through MyAccount.<br>Generally look to find a solution to a non-urgent query themselves on websites, using services like web chats, FAQs and forums. |
| 2 | Overall, a younger segment and mainly living in higher and medium income households. Low levels of debt with water bills.<br>Mainly tech savvy and comfortable using smart phone apps and other online devices. More likely to have a number of contacts about their billing than other segments.<br>Value ease and convenience from their suppliers – most likely segment to switch their suppliers for other household products.<br>Generally look to find a solution to a non-urgent query themselves on website, using services like web chats, FAQs and forums. |

| Segment | Segment overview |
|---|---|
| 3 | Broader mix of ages and significantly more likely to live in lower-income households. Most likely to find their water bills unaffordable.<br>Mixed confidence levels when using any device online services (e.g. apps, smart phones, web chat) to manage their finances.<br>Prefer contact by phone when they have a query, but many comfortable with email too. Some will not want to use online services. Majority of contact with us by phone or other offline means (e.g. letter) and like to use the same contact method over time.<br>Most likely segment to switch contact channels when they do not get a quick response and make proactive contact. |
| 4 | Older age profile (41% are 45-64) and significantly more likely to live in lower income households. Higher levels of debt with water bills.<br>Overall, they are tech savvy and comfortable using online services, particularly if it helps them save money on their bills.<br>Overall, they are time poor and looking for ease and convenience when they do need to interact with their suppliers.<br>Show little interest in engaging with our services, preferring a low contact relationship. Almost all pay their water bills by direct debit. |
| 5 | Oldest segment overall and significantly more likely to live in lower income households. Higher levels of debt with water bills.<br>Very low tech confidence. More than one-third do not have access to the internet, do not know how to use it or do not use it much if they do. No customers within this segment use our digital services.<br>Vast majority prefer phone contact and like to speak to us in person. They prefer more personal contact and are unlikely to change the way they contact their supplier. Most pay their water bills at the bank or post office.<br>Significantly higher proportion of this segment found in our South Staffs region. |

We will continue to refine and build our knowledge of the segments over time to develop a better understanding of our customers and their needs. We will also start embedding the segment approach into our communications and marketing strategy to ensure we are providing a tailored and bespoke service to our household customers.

## 3.3.4 Providing a proactive customer service for developer services customers

We have a dedicated team which provides all our developer customers with a personalised service. Builders, large developers, SLPs, NAVs, and consultants are all supported by a knowledgeable team – from initial enquiry through to scheme completion on site.

### 3.3.4.1 Delivering our ambitions

In our business plan for 2020 to 2025, we outlined our plans to build a new approach to developer services. Today, we can demonstrate the step changes we have made to the experience our developer customers receive from us. Our D-MeX performance score has improved from 83.59 in 2020/21 to 87.56 in 2022/23 and our ranking in the sector so far during this AMP has gone from 11th to 7th.

Within this performance we have been delighted to see our qualitative performance improve such that in 2020/21 around 70% of customers typically scored our service as 7 out of 10 or above, whereas in 2022/23 almost 80% of customers score our service as 7 out of 10 or above. Over the same time frame, we also increased the percentage of customers scoring us 10 out of 10 – going from around 20% in 2020/21 to around 30% in 2022/23. This is particularly pleasing as this element reflects the direct views of our developer customers.

This improvement has been the result of us putting an action plan in place focusing on a number of key themes, including:

- providing regular communications and being easy to access for our customers;
- providing a speedy service with quick response times;
- demonstrating value for money;
- providing clear and consistent information; and
- delivering on our commitments.

Our action plan has included small steps, such as more pre-start meetings and opportunities to meet developer customers at the start of projects, through to more involved actions, including internal team structural changes to ensure a more seamless experience.

Our current experience and D-MeX performance need to continue to improve to enable us to meet our upper quartile ambitions. This is where we hope to be at the start of AMP8. We are very aware that we still have a lot of work to do. We will continue to listen to our customers and develop our action planning around their feedback, as we have done before.

### 3.3.4.2 Market growth

The start of AMP7 was heavily impacted by the COVID-19 pandemic. This caused a downturn in site-based activity, particularly in 2020/21 and 2021/22. In 2022/23 we saw the market return to more expected levels in terms of connection volumes. We are pleased that our SLP market share has increased to 61% in 2022/23, having dropped to 35% in 2020/21 from 48% in 2019/20. Equally, the number of appointed NAV sites has grown from 3 in 2020 to 17 in the current year to date. The number of front-end enquiries has also increased.

We are proud that the experience of SLPs and NAVs across our Cambridge and South Staffs regions has supported this growth, giving developers the choice to select the optimum route for their development. In the current AMP to date we have placed a particular focus on supporting SLPs and NAVs:

- through the introduction of tailored website content;
- through the development of specific user guides; and
- by hosting forums to consider both day-to-day and strategic matters.

Equally, we have placed a focus on meetings with CCW and Fair Water Connections, the organisation set up to support SLPs, to discuss a number of topics, including:

- developer charges;
- regulatory changes;
- service improvements; and
- D-MeX performance.

More recently, we have met with the Independent Networks Association (INA), which represents network operators in the water sector. We hope to develop this relationship in AMP8.

### 3.3.4.3 Our plans for AMP8 and beyond

We will continue to develop our plans around the key themes of our developer services customer priorities. We remain mindful that each of our customers requires a tailored service. Much like in AMP7, we will deliver a number of smaller actions, such as improvements in how we present our paperwork and information. We will also carry out more involved actions, including implementing automated status updates and our digital self-serve offerings.

We understand that many developer customers value being able to meet with or talk to individual members of our team. For some customers, their preference is not to self-serve using an online system, and during the current AMP we have placed a strong focus on our human contact.

In AMP8 we will continue to explore the optimum self-serve options to ensure the right capability is available for those customers that want to use this route. We will invest in the solutions that provide the biggest impact. We will consider self-serve options for specific steps, such as:

- upfront applications;
- tracking status; or
- making payments.

Equally, we will also consider implementing a self-serve option for specific application types to meet the range of customer preferences. One focal point will be in enabling developers to access our asset information, which customers and consultants require at the pre-development stage. And we will continue to improve the contact points we have with our customers. We also expect to increase the number of automated updates our customers receive to keep them up-to-date about their application status.

On a more strategic level, we will continue to offer developer services forums. During AMP7, however, we have found that these meetings may not always be the most effective way of engaging with customers. So, we will also consult with our developer customer to seek feedback, particularly on topics such as developer charges.

### 3.3.4.4 Water efficiency and removing the income offset

AMP8 will see the removal of the income offset mechanism from developer bills. This is something we have discussed with our customers for some time. We will continue to make our developer customers aware of these changes and will support them through the transition.

In addition, we think the water sector as a whole has to do more to support developers to build water efficient homes. This is especially true in our Cambridge and South Staffs regions, which have both been categorised as water stressed by the Environment Agency. We will continue to build on our existing water fittings discount scheme and will implement a tiered approach to promoting reduced consumption on new developments. This, in turn, will enable our developer customers to receive discounts and rebates, which will also mitigate the effects of the income offset mechanism being removed.

## 3.3.5 Providing a proactive customer service for non-household retailer customers

Following the opening of the non-household retail market in April 2017, we took steps to functionally separate our wholesale and retail activities. We were the first company in the water sector to do this and we are proud of the benefits it has driven, including streamlined processes and a strong focus on customer advocacy and service. Whether it is a small business with a few employees or a large-scale operation, we work hard to ensure that each and every business customer receives the best possible service from us.

Within our contact centre, the Wholesale Service Desk has made a real difference to our retail market performance. Our dedicated Retail Market team has helped to generate a cultural change within our business, encouraging collaboration between business and service partners, to deliver the best outcomes for our retailers and their end customers.

We have around 43,000 non-household customers across our Cambridge and South Staffs regions and we currently have agreements in place with 22 retailers. We recognise that, as a wholesaler operating in the non-household retail market, we can help facilitate an effective and efficient market and we perform this role for retailers and customers alike in a non-discriminatory way.

Within the retail market, there are two sets of key performance indicators (KPIs). These are:

- operating performance standards, which measure the time taken to deliver a retail work request compared with a specified service level. These standards include activities such as replacing faulty customer meters; and

- market performance standards, which measure the time taken to update the market compared with a specified service level. These standards include activities such as updating details in the market following a meter replacement.

Our current strategy of engaging with our non-household retail customers focuses on using the Market Bilateral processes to build effective relationships. We also hold regular meetings with MOSL and CCW, alongside regular review meetings with retailers that cover things like performance metrics, engagement plans and performance against our bespoke R-MeX measure of customer experience. This level of engagement is starting to deliver tangible improvements. In 2022/23, for example, we achieved an average score of 7.4 out of 10 in MOSL's output report published at the end of March 2023. This is the highest score we have achieved since we launched our R-MeX measure in 2020 and it demonstrates our commitment to building effective retailer relationships.

During AMP8 we will build on our existing outreach strategy in the non-household retail space. We will invest in more metering technology to provide better visibility of data. This will make it easier for us to target unread meters and identify leaks quickly.

Our thinking in this space is closely aligned with CCW's most recent review of business customers' experience of the retail water market. We have taken learning from its research to design a plan to address long unread meters. We understand the value of smart meter data, which is why we changed suppliers in 2021. In line with our metering strategy, we now install more innovative water meters, which are capable to adapting to various smart technologies. We will roll out a suite of smart meters across our Cambridge and South Staffs regions using a targeted approach. We will also prioritise retail market customers by considering:

- those with high levels of water use;
- environmental factors, such as available water resources; and
- meters that have not been read for 12 months or more.

We will make sure data from these smart meters supports more accurate billing and allows businesses and retailers to be more water efficient.

### 3.3.5.1 Collaboration to help our retail customers save money

Throughout 2023 we have held a series of workshops with our retailer customers to understand more about their priorities for AMP8. Consistent themes emerging from these workshops including the challenges of the COVID-19 pandemic and the hardening economic landscape driving more cost-saving approaches among retailers. This gives us an opportunity to enter into partnership arrangements with energy suppliers to provide a 'wider than water' view of support for these customers.

We also recognise that our non-household customers want initiatives that are low effort and maximum cost benefit. So, we will be proactive in our messaging and focus on using communication and education to deliver some quick wins. We have taken learnings from MOSL's 'one size, fits all' approach, recognising the different requirements across property types. For example, a community centre might have different needs to a farm with livestock. So, we will apply segmentation to those categories where possible and communicate our messages accordingly. One example of this would be providing a tailored service in the event of a supply interruption, during which we will note the customer segment and take appropriate action. In this situation, a care home, for example, would need immediate alternative supplies.

**How we are securing your water future...**

"We endeavour to provide the right solution for every customer and support them when challenges arise. My team is accountable for the delivery of the operational performance standards and market performance standards set by the non-household retail market operator" – Sarah Maddaford, Retail Market Manager

For low volume and high complexity customers such as farms, we will encourage the use of water butts for gardens and grounds, and provide these proactively as an incentive to reduce water use. For low volume and low complexity customers such as pubs and cafes, we will highlight the benefits of making small changes to save costs – for example, installing water efficient taps.

To ensure we are providing the best possible support around consumption insight, we will endeavour to:

- bill on actual usage rather than future estimates;
- proactively sates the impact of any large leaks with an associated cost;
- provide easy access to usage data through meter reads; and
- ensure our communications are fit for purpose across the MOSL-led customer segments.

We will also explore smart metering options to support our non-household customers in the event of leaks on their properties. We understand this is something our non-household customers are concerned about and adding further alerts to our metered estate means we can act quicker – sharing data to encourage retailers to check for leaks when they may not have done so previously. And we will introduce self-audits as a web-based tool to evaluate consumption traits and share information about potential savings. We will explore extending this to site visits as well, to enable both basic and high-level recommendations on water use.

# 3.4 Being embedded at the heart of the communities we serve

## Our communities

We will use partnerships and education to lift our communities, **creating space and opportunities** to help people work and thrive.

**We are committed to making sure that help and support is always available to those customers who need it, and that we also encourage the next generation of water champions through our education outreach programme. In 2018 we took a pioneering approach to community engagement and opened the first community hub in the water sector, located in one of the most structurally challenged parts of our South Staffs region. We wanted to make sure customers could access our services face to face, in a trusted and friendly environment. Since then, we have launched a mobile 'water on wheels' community service in our Cambridge region and have hosted several 'pop up' hubs in our South Staffs region to engage with some of our harder-to-reach communities.**

## 3.4.1 Educating our future customers

In our business plan for 2020 to 2025, we set ourselves the ambitious target of engaging with 6,000 young people a year. Our aim was to create the water champions of the future by helping to develop young people's knowledge and understanding of where their water comes from and the processes involved in delivering that water to their homes every day.

Through our education outreach programme, we provide hands-on sessions for schools across our Cambridge and South Staffs regions. These link to the National Curriculum, including in the areas of science, literacy and geography. We also provide a range of learning and teaching resources for teachers, along with online activity packs and quizzes.

Having previously confined our programme to primary school age children, in 2022/23 we expanded our education offering into secondary schools. We now offer activities for children aged between 4 and 14, and are currently developing a programme for older students that will complement their GCSE and A level studies.

We want to continue to inspire future generations and teach them about the value of water, helping to change how they think of, relate to and use it in their homes and their communities. So, by 2030 we have an aspiration to reach out to 35,000 pupils in our Cambridge and South Staffs regions with our mobile education programme to encourage more young people to use water wisely. Key to achieving this will be the partnerships we create with schools across Key Stages 3, 4 and 5, and will include providing mentoring and work experience opportunities.

### How we are securing your water future...

"My role involves expanding our educational offering by designing new and engaging workshops on water efficiency, the water cycle and how we can better value our water resources. These workshops are free for schools across our Cambridge and South regions" – Emily Eden, Education Co-ordinator

In addition, we are carrying forward our plans from the current AMP to develop and implement an award scheme for local schools. This will enable us to demonstrate our support for their water efficiency actions and enable them to be recognised for it as well. It will also give us the means to evaluate the effectiveness of our education outreach programme, which we can then share with customers and stakeholders. And we recognise the importance of supporting young people across both regions. We will invest in our training centres to provide workshops from a range of topics. From support with writing CVs to work experience, we want to engage with our communities. This includes reaching out to schools and other organisations to share the benefits of working in water, demonstrating the breadth of engineering, scientific and customer-based roles. In this way, we will add sparkle to the sector through a planned programme of workshops.

**Securing your water future – engaging with future customers through our Young Innovators' Panel**

Since 2017 we have delivered a step change in our engagement, including with our future customers. We launched a Young Innovators' Panel in our South Staffs region in 2018 to bring the voices of young people aged between 16 and 18 directly into our organisation. Our Cambridge region Young Innovators' Panel launched in 2019. For the students, being a member of the Panel gives them the opportunity to work in teams to overcome a business challenge and directly shape our plans. They then present their ideas to members of the Board and our Executive team.

We launched the recruitment process for our 2023 South Staffs Panel in March 2023, receiving a record number of applications (65 students from 22 schools across the region). We ran a competitive three-week process to select our 25 Panel members. The first session in June included immersive sessions about how our company operates, along with group discussions with subject experts from across the business on specific issues around water efficiency, pollution, climate change and global water security.

The students were then split into four teams and briefed to create an engaging educational resource that could be incorporated into a classroom-based workshop for Key Stage 3 pupils (that is, 11- to 14-year-olds). They then returned to the business in July to deliver their pitches to a judging panel comprising senior executives, an independent Board member and the Chair of our Stakeholder Challenge Panel. We also invited three Key Stage 3 pupils from the Friary School in Lichfield to provide feedback from a target audience perspective.

The pitches featured ideas that came in the form of app designs or board games, which would enable Key Stage 3 pupils to develop their understanding of each topic through game play and an exploration of the world of water. The winning team presented an interactive board game aimed at educating young people about the impact of climate change around the world, with players travelling the globe and answering questions.

Our education co-ordinator is currently turning these ideas into a tangible addition to our outreach activities. The aim is to help future generations learn how to place more value water as a finite resource. We are actively looking at ways to assess the success of this approach and track its impact. This will be carried through to our Cambridge Young Innovators' Panel, which will return in 2024.

## 3.4.2 Being visible and accessible in our communities

We are proud of the work we have done through our community hub. We have made meaningful connections with many local organisations, working in partnership with them to deliver support straight into the community. While, from a purely cost perspective, it may not be the most efficient way to engage with our customers, the insight we gain from this is enormously beneficial to us. So, we are committed to maintaining and enhancing our community presence. We are passionate about building long-lasting relationships and also about providing a friendly service to those customers who want to engage with us face to face. Our community hub continues to be a vibrant, well-used space at the heart of the local community.

### 3.4.2.1 Going wider than water

During AMP8 we will invest to increase our community presence, focusing on our mobile approach. We will create two pop up hubs that will operate across our South Staffs region, using data to inform provide the geographic placing of this support. This will enable us to target the areas with the greatest need in terms of deprivation, low levels of contact and low meter penetration. We will use this dataset to link this aspect of our community engagement with our education outreach programme, our universal metering programme and our regular water efficiency campaigns.

We are committed to adopting a 'wider than water' approach to community engagement, working with local third-party organisations and charities and drawing on other insights to develop an ongoing vulnerability programme. We understand that our community presence needs to provide holistic support, so we will work with local partners to inform our plans. We will also offer what we are calling 'smart home visits' to customers who need more tailored advice and support, which will align closely with our affordability strategy. A smart home visit will include:

- tailored advice on changing behaviours around water use;
- installation of water efficiency devices; and
- identification of any internal leaks in the customer's property.

To ensure we are reaching the customers who need us most, we will target these home visits at households that have recently moved onto a smart meter and that are using more than 500 litres of water a day.

**How we are securing your water future...**

"I love what we do in the community – from our hub in Wednesbury to our outreach work. It's all about the customers. We support them in all sorts of ways. It's not just about their water" – Amanda Lee, Community Engagement Manager

We also want to make sure our community engagement programmes reach all our customers. This includes those communities that have had little contact with us in the past because of, for example, cultural or language barriers. We have been working with Impact Research on a demographic study across our Cambridge and South Staffs regions that encompasses a range of factors, including:

- age;
- gender;
- occupations;
- languages spoken;
- ethnicity;
- household income; and
- quality of life perceptions.

We will ensure that we engage with customers from different background and cultures, linking in with religious leaders across our communities, to keep us up to date with best practice tailored communication and understanding.

**Securing your water future – engaging with our communities through a diversity-led water efficiency project**

As a small but ambitious water only company we are always thinking about different ways of doing things – and the benefits this will deliver for our customers, society and the environment. Throughout AMP7 we have been striving to embed a culture of innovative thinking across our business, helping to drive more efficiency across all our operations. This includes adopting lean techniques and agile approaches. It has also meant streamlining our processes so that we can deliver a better experience for our customers.

In May 2023 we were delighted to be announced as one of the winners of the Water Breakthrough Challenge (Catalyst Stream) – the latest competition for funding from Ofwat's £200 million Innovation Fund. We were awarded £270,000 for a diversity-led water efficiency project.

Working with a range of partners, including Waterwise, Hindu Climate Action, Cambridge Central Mosque, Cambridge University's Divinity Department and other water companies, our project focuses on establishing a deeper understanding of how water is used and valued in different faiths and cultures. This will enable us to develop a more inclusive and comprehensive water efficiency framework combined with the potential for water saving interventions that support different faiths and traditionally hard-to-reach customers and communities.

Our project aims to address a gap in the water efficiency support measures offered to different faiths and cultures. It will address the need to reduce PCC and protect the environment to meet the future twin challenges of climate change and population growth. It will also help to build trust and social cohesion by enhancing how we engage and support those communities that may not be aware of the support available to help them, or that may not be confident to come forward because of language or cultural barriers.

We think our project will help us to develop sustainable ways to engage with diverse and faith communities. This will help us meet our PCC target of 110 l/p/d by 2050, as well as our short-term demand requirements. It also strongly aligns with and supports Ofwat's strategic PR24 theme of driving improvements through efficiency and innovation. This is because it will enable us to develop and test new interventions to deliver the services customers and society will value, now and in the future. By recognising the needs of our diverse communities, the project will provide other water companies within the sector with an academically rigorous evidence base to ensure the most appropriate interventions are used to support customers from similar communities.

The project will deliver the following outcomes.

- A greater academic understanding and evidence base in making a stronger link between customers' water use profiles and faith and culture.
- A comprehensive water efficiency engagement and support framework for diverse and faith communities.
- New and tested sustainable practices and campaigns related to faith and culture that can be adapted, replicated and scaled up.
- Significant water savings, potentially lower bills and new customers registered on our PSR or receiving some form of financial support from us.

## 3.4.3 Leading by example

Although we are one of the smaller companies in the water sector, we do not think our size relative to that of other companies should constrain our ambition. Indeed, we think it makes us more agile and better able to flex to changing circumstances. It also means we can tap into local knowledge and expertise more easily. This helps us to focus our time and attention on being a sector leader in delivering public and social value and purpose, and supporting the communities across our Cambridge and South Staffs regions.

Key to this is making sure we encourage the right culture and behaviours, focusing on the positive benefits that high-performing people can bring to the business. We recently joined fellow Group company, IWS-M&E, in rolling out a programme of human and organisational (HOP) workshops for leaders and senior managers across both businesses. The workshops focused on improving performance by understanding and managing the complex interactions between human behaviour and organisational systems. They explored:

- different types of errors and their causes;
- organisational drift;
- normalisation of risk; and
- how to learn from success and failure.

The aim is to create a psychologically safe culture, where everyone is able to speak up and hold others to account in an appropriate way. Looking ahead, we will continue to embed HOP principles in our leaders' improvement plans, and also in our communications and coaching, focusing our attention on the factors that drive behaviours.

But we also think it is important to encourage the next generation of water sector experts across our business. At the start of the current AMP, for example, we relaunched our apprenticeship scheme as a way of focusing our attention on succession planning in particular parts of the business, including water production and leakage reduction. Looking ahead to AMP8, we will work with other Group companies to develop and implement a graduate programme, with specific pathways for trainees to rotate through. We think that implementing such a scheme at a Group level will deliver a number of benefits for us, particularly in bringing skills and ideas from other parts of the Group into our business in an efficient and cost-effective way.

Underpinning all this is good engagement. We will continue to engage regularly with our people, using the results of surveys to drive positive change across the business. In addition, we will continue to engage with our customers and stakeholders, which we discuss in more detail in chapter 4 on page 69. We will also continue to develop our community engagement approach, building meaningful and long-lasting partnerships with local groups, charities and customer-facing organisations across our Cambridge and South Staffs regions.

# 3.5 Running a sustainable, long-term business

## Our business

We will lead in **adapting to climate change** and will run a safe, efficient and sustainable business, with a highly-skilled workforce.

**We have a long history of delivering high-quality and reliable water supplies into our communities. But the challenges we are facing in the future mean we have to be able to adapt and respond to changing circumstances quickly and flexibly. This is to ensure we continue to always deliver the services our customers expect and pay for. At the same time, we will continue to play our part to deliver wider environmental and societal goals. This includes playing our part to deliver the water sector's ambitious net zero operational carbon emissions target by 2030. To do this, we will need to make sure that our people have the skills needed to deliver our long-term ambitions.**

## 3.5.1 Delivering net zero carbon emissions

In 2019 Water UK launched its Public Interest Commitment (PIC) to reinforce the social contract that is implicit between water companies and their customers. Within the PIC were five ambitious goals for the water companies, including to achieve net zero emissions by 2030[21]. It then followed this up in November 2020 with its Net Zero 2030 Routemap, a ground-breaking plan to deliver ad net zero water supply for customers by 2030. This was the first sector-wide commitment of its kind.

The water sector is unique in that as well as providing an essential public service and being the owner of major infrastructure assets, water companies are also landowners and custodians of the natural environment. In addition, they are energy-intensive businesses, leading to millions of tonnes of greenhouse gases (GHGs) each year. For us, this amounts to tens of thousands of tonnes of carbon emissions a year – not just from the energy we use to abstract, treat and pump the water we provide to our customers, but also from the activities associated with these processes, such as transport, chemicals, buildings and our supply chain.

Our net zero journey to date has focused primarily on reducing our scope 1 and 2 GHG emissions. Scope 1 emissions are GHGs released directly by the business; scope 2 emissions are indirect GHGs that are released from the energy purchased by the business. The activities we have carried out to reduce our emissions during AMP7 include:

- converting the diesel generators at our Hampton Loade water treatment works to biofuels. We were the first company in the sector to do this;
- taking delivery of 15 electric vehicles (as at 31 March 2023), with more to follow in 2023/24 and 2024/25;
- completing the first phase of a project to install electric vehicle charging points at the Fulbourn Road office in our Cambridge region, the Green Lane office in our South Staffs region, and at our Hampton Loade and Seedy Mill water treatment works; and
- investing in more energy efficient water pumps.

Alongside these activities, we have also carried out a full renewable energy assessment and have explored a range of energy efficiency opportunities, including:

- the conversion of standby generation of biofuels;
- re-using heat from existing operations rather than replacing boilers;
- installing low-energy lighting across our sites;
- installing energy management controls;
- launching heat pump feasibility studies at several sites that currently use fossil fuel boilers for hot water;
- installing rainwater harvesting at our offices for ground maintenance and vehicle washing facilities; and
- using engagement to encourage behavioural change.

And we have benchmarked best practice from across the sector and continued to employ our pump efficiency programmes, with ten sites identified and surveyed for 2023.

Looking ahead to AMP8, we will continue to drive our net zero ambitions through a combination of activities, including demand reduction, efficiency measures, and customer and stakeholder engagement. In addition, we will consider the suitability of Corporate Power Purchase Agreements (CPPAs) for our business. These are long-term contracts between the owner of a renewable energy plan and the corporate buyer for the delivery of 100% green electricity and the corresponding Energy Attribute Certificates. The electricity can be delivered virtually through a Virtual PPA, or physically through a Physical PPA.

We will also consider nature-based insetting solutions targeted at our value chain and communities. Insetting is an approach to carbon footprint reduction that helps companies to meet their sustainability goals, while supporting actions that are relevant to their stakeholders and communities. It involves implementing

[21] 'Net zero' means achieving a balance between the greenhouse gas emissions put into the atmosphere and those taken away. When what we add is no more than what we take away, we reach net zero.

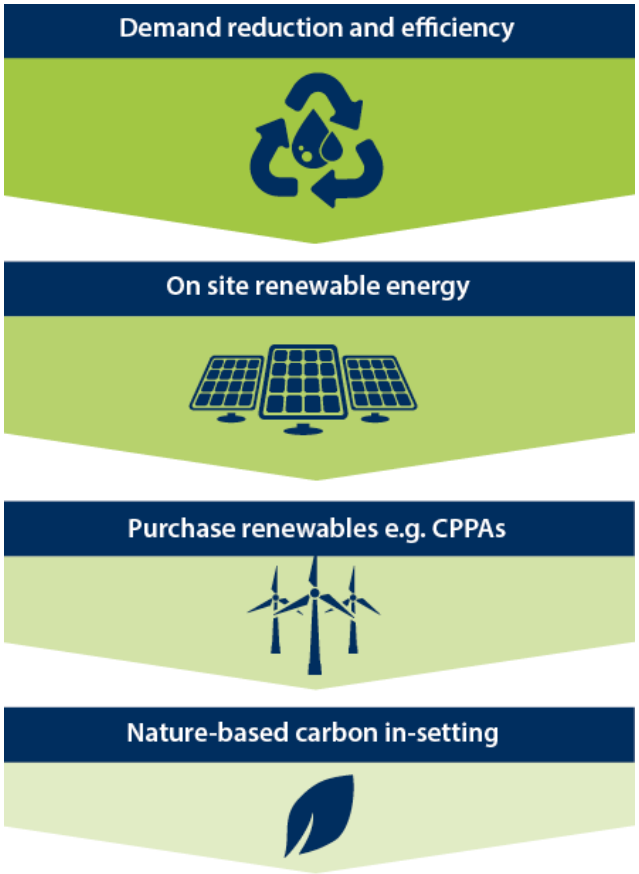
of nature-based solutions such as reforestation, agroforestry, renewable energy and regenerative agriculture.

We will also invest £7.2 million in ground-mounted photovoltaic (PV) electricity generating assets at key sites across our South Staffs region. This investment is in addition to our existing plans to reduce our scope 1 and 2 carbon emissions and will enable us to achieve the following objectives.

- It will help us to deliver absolute carbon emission reductions.
- It is affordable and separates us from global volatile energy markets.
- It will improve resilience and security of supply.
- It will give us cost and budget certainty.
- It will maximise value to stakeholders through the use of assets and the leveraging of commercial, funding and technology solutions.

This investment will form the second tier of our carbon emissions reduction hierarchy, as set out in figure 6 below.

**Figure 6 Our carbon management hierarchy**

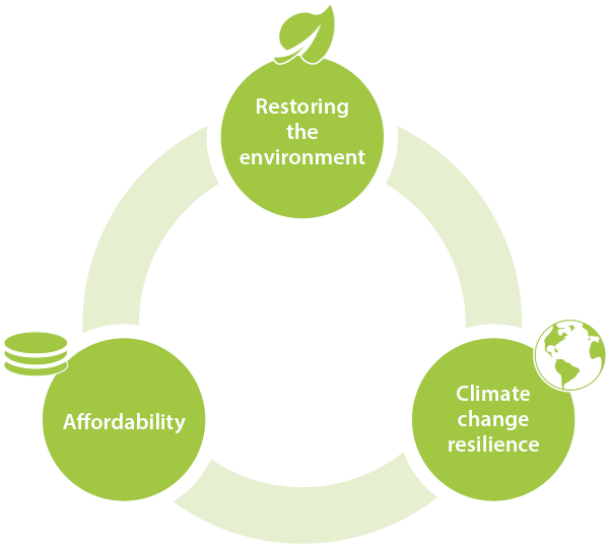



Our net zero and carbon reduction strategy is linked to a long-term energy strategy that aims to achieve our net zero ambitions while keeping our costs affordable. This is illustrated in figure 7 below.

### How we are securing your water future...

"We have a systematic and strategic approach to carbon management that has helped us to reduce our greenhouse gas emissions. Ultimately, this will enable us to reach our initial and final net zero emissions targets by 2030 and 2050, respectively" – Laure Curtis, Carbon and Energy Compliance Officer

**Figure 7 The climate change, environment and affordability trilemma**




To demonstrate customer and stakeholder support for our net zero ambitions and plans we worked with Explain Research to convene Citizens' Juries in our Cambridge and South Staffs regions comprising six virtual and two face-to-face meetings. During these sessions, we presented our net zero journey to date and our ambitions for AMP8 and beyond. We asked the Juries to feedback on their priorities, including the scale of our ambition, timescales and how they wished to be involved in helping us achieve our net zero target. We discuss the role the Citizens' Juries have played in helping us to shape our plans in chapter 4 on page 69.

## 3.5.2 Running a safe, efficient and sustainable business

We are committed to running a business where our customers can always trust us to deliver the services they expect and pay for in a safe and efficient way. This means making sure our people are empowered to carry out their roles effectively. It also means streamlining our processes, identifying opportunities to reduce waste and drive inefficiencies out of the business.

At the start of the current AMP we adopted best practice lean and agile techniques from other sectors to help us improve many of our major processes and modernise our ways of working. We will continue with this approach in AMP8 to help drive more efficiency – an area where we have traditionally performed well relative to other companies in the water sector. We will also continue to drive forward some of the initiatives that have come to the fore since the COVID-19 pandemic. This includes working with other Group companies to implement a dynamic working model, with hybrid working available for our office-based people.

Key to the success of this approach is maximising our use of technology. Following the criminal cyber-attack on our parent company in July 2022 we engaged leading IT security experts to work with us to reduce the risk of any further access by the criminals responsible for the attack. They made some recommendations on additional IT security enhancements, and we have already implemented some of these. Looking ahead to AMP8, we will continue to invest in our IT and OT infrastructure. This includes investing in systems that will help us deliver our ambitions for:

- asset health and asset management;
- customer experience;
- network management; and
- water quality.

We also want to accelerate our transition from management information (MI) to business intelligence (BI) – moving from 'after the event' management reporting to business intelligence data capture and management to inform decision-making across the business. This will give us robust, transparent and accessible data and information that will predominantly be self-service, freeing up our people to focus on problem-solving and business improvement rather than reactive reporting.

Over the course of the AMP, we will invest £5.5 million on responsive technological solutions that will help to drive more efficiency across the business (as discussed in more detail in section 3.1). We will also continue working with other Group companies to develop our business partner model – sharing expertise and learnings across a number of shared services, including HR, health and safety, communications and IT.

We will also continue to encourage sustainable approaches across our business, following the definition of sustainability from the Institute of Environmental Managers and Assessors).

"Sustainability represents the integration of environmental health, social equity and economic vitality … to create healthy, diverse and resilient communities, organisations and economies for our current generation and generations to come."

As a responsible, customer-focused and regulated business, we have to maintain a balance between making sure we play our part in delivering climate change resilience, restoring and enhancing the environment and keeping our bills affordable to customers, as illustrated in figure 7 above.

As described in section 3.5.1 above, we have started this journey and, within the scope of Water UK's original routemap, we will meet our objectives under this commitment. But we are not stopping there and are considering our total impact in terms of carbon emissions. To this end, we have already embarked on our long-term strategy to address all scope 1, 2 and 3 emissions associated with our business. This will guide not only the emissions associated with the abstraction, treatment and distribution of potable water, but also those emissions associated with our total value chain, including purchased goods and services.

### How we are securing your water future…

"My role is to manage our sites and facilities directly and effectively, proactively protecting our assets and responding to urgent maintenance issues. This is so we can always be sure our sites are fully functional and in top condition, to serve our customers and our colleagues alike" – Emily Heard, Senior Facilities and Contracts Co-ordinator

We will take a pragmatic approach to embedding sustainable practices across our business, including taking mitigating action to limit our impacts as technology and other solutions evolve and mature. So, our focus will be on 'doing more good' rather than 'doing less bad' within the value chain and making sure we develop more nature positive solutions within our operations.

We are reviewing our net zero plans and current environmental initiatives to identify the most appropriate, affordable and impactful insetting solutions that will benefit customers, communities, the environment and our carbon emissions reductions.

Underpinning these sustainability approaches will be to work we do to ready our supply chain for the challenges of AMP8. We discuss this in more detail in sections 6.4.3 on page 122 and 6.4.4 on page 124.

## 3.5.3 Enabling a skilled workforce

Our people are critical to the success of our business. So, making sure we recruit and retain the right people with the right skills at the right time is crucial to ensuring we can deliver our long-term ambitions. We think this will help us to better manage the recruitment peaks and troughs usually associated with the five-year regulatory cycle.

We recognise that, in common with other companies in the water sector, we have an ageing work force. So, our key areas of focus for AMP8 will be on:

- succession planning and talent management;
- identifying the critical roles and skills gaps across the business; and

- managing risks around single points of failure within particular roles or teams.

In addition, we will identify development and training needs at a professional level, supporting our people to ensure they always deliver their best for our customers and the business. This includes making sure our leaders and managers have the skills they need to carry out their roles effectively. It could also include supporting professional accreditations for key roles. We have already made a start in this area, with the introduction of a HOP programme for senior leaders across the business (as outlined in section 3.4.3 above).

But it also means:

- applying lean approaches to our resource planning and requirements to maximise efficiency and enable us to stay competitive in the market place;
- developing our approaches for managing performance and recognition/reward; and
- implementing a new approach to inductions, including making sure that the equipment people need to carry out their roles is available straight away.

### Securing your water future – developing people to deliver our long-term objectives

Over the past year, a number of teams, including Capital Delivery, Asset Management, Facilities Management and Procurement have been implementing a self-driven approach to personal development.

This approach is based on the premise that each person within the business should have the opportunity to drive their own professional development within their careers and having the autonomy to set their own delivery objectives, identify their own training needs and set their own development plans. It links very closely with our six-monthly performance review process, to ensure that the objectives our people set for themselves are SMART (Specific, Measurable, Achievable, Relevant and Timely) and that the development plans help to deliver the long-term objectives of the business.

Our approach relies on self-motivation, with our people formulating their own plans so the business can be confident in investing as the motivation to succeed is built in.

We recognise that self-development can take many forms – from mentoring sessions by a senior member of staff, to short-term day courses and long-term commitments to academic and professional qualifications. Development plans are reviewed regularly through line manager on-to-one meetings and more formally through our performance review process. Within this approach, we are currently supporting our people in different ways, some of which are outlined below.

- We are supporting a number of young engineers across the business with their undergraduate BEng degrees on either a day release or evening study basis. This will provide a strong foundation for the next generation of engineers within our business.
- Members of our Capital Delivery and Facilities Management teams are undertaking National Examination Board in Occupation Safety and Health (NEBOSH) and other specialist health and safety courses. These qualifications and knowledge will ensure we have the skills and expertise to provide supervision and assurance that our contractors are operating safely on our sites.
- Some of our people have mentoring arrangements in place with senior leaders to provide an independent sounding board, and to give work support and advice. This provides an environment where our people can discuss challenging matters and test out ideas before bringing them into a live work situation.
- Two members of our Procurement team are currently working towards Chartered Institute of Purchasing and Supply Level 4 through online self-study, supported by a university, which will lead to a professional procurement qualification.

Our Executive team is strongly supportive of our approach to ensure we have the necessary skills in house to enable us to run our business effectively and ensure long-term succession planning.

The key to the success of this approach is that it is self-driven, with individuals looking towards their next steps – both within our business or beyond it.








# Part 3: Meeting our regulatory requirements

# 4. Engaging with customers and stakeholders

## Providing an essential public service gives us the opportunity to interact with tens of thousands of individual customers and other stakeholders every year. To ensure we achieve our vision and deliver wider societal and public value, it is important that we engage to understand how we can best meet the needs of the communities we serve.

For this business plan, we have carried out our most in-depth and far-reaching research and engagement programme to fully understand what our diverse population of customers, stakeholders and citizens expect us to deliver, now and in the future.

We would like to start by saying thank you to the following.

- Our **independent research partners**, which have worked collaboratively with us – and with each other in some cases – to deliver our research programme to a high-quality standard over the past three years.
- The **Board and our investors** who have input into, observed and challenged our research and engagement programme.
- Our **fellow water companies**, which have also shared advice and their own research findings, allowing us to compare them with our own. We would also like to thank Ofwat and CCW, which have led the collaborative national research programme, the outputs from which we have used to help shape our plans.
- The **independent Stakeholder Challenge Panel**[22], which has challenged our engagement – and pushed us even further on behalf of our customers and stakeholders on important considerations when making key decisions.
- The **hundreds of stakeholders** that have provided their expert views and expressed their preferences for what they expect our plans to deliver.
- The **thousands of customers and citizens across our Cambridge and South Staffs regions**, who have given up their time to provide feedback across a wide range of areas. Our biggest thank you goes to them for their considered input and challenge.
- Our **people**, who have either presented to customers or who have helped us to produce the vital stimulus material to ensure we shared all the necessary information with our customers.

Below, we describe how we have used all the feedback to shape our plans to ensure we deliver in a fair and balanced way for all.

We also showcase our customer research on our website to demonstrate how it has been used so there is a clear line of sight between insight and action.

We start by looking back to Ofwat's PR19 price review process, where we delivered a notable step change in the ambition, quality and quantity of our research and engagement programme – and where we were one of only two water only companies to achieve a 'B' rating by Ofwat in its initial assessment of our business plan for 2020 to 2025. We achieved this by putting place a robust customer research strategy in April 2017, which saw us engage with more than 40,000 customers by early 2019, using a wide range of research and engagement techniques. Throughout, the independent Customer Challenge Group – what we called our Customer Challenge Group – robustly challenged our engagement to ensure diverse customer voices were embedded in the decisions taken in our plan.

We began planning for PR24 in early 2020. Our main objective was to raise the bar even higher in terms of levels of engagement. In the following sections, we describe how we have achieved this, what our customers and stakeholders have told us and the approaches we have used to understand their views to inform the key decisions in our business plan. We have also expanded our use of engagement techniques – particularly in the use of in-depth deliberative ongoing studies – to deliver high-quality insights that are at the heart of our decision-making.

While our main focus is on the quality and effective use of insights as required by Ofwat, we have also expanded our reach since PR19. We have engaged with more than 92,500 customers across our strategic research and ongoing BAU insight programmes. We have also listened to thousands more through their day-to-day interactions with our customer-facing teams and our digital services.

A comprehensive list of the PR24 research studies and the wider sector studies we have drawn on as part of our engagement can be found on page 162.

[22] The name we have given to our Independent Challenge Group.

# 4.1 Laying the foundations for success at PR24

**When our PR19 customer engagement programme finished in summer 2019, we did not take our foot off the accelerator. Instead, we immediately set about building on the learnings and the gaps we identified, such as the need for more ongoing two-way engagement to improve our overall approach. This detailed planning is the foundation for making sure we achieve the right outcomes for our plans.**

We focused on improving our BAU insight programme. This included recruiting an additional insights specialist into the business. Our commitment in this area aligned to a key recommendation in 'Engaging water customers for better consumer and business outcomes', published by CCW and Blue Marble in April 2020. This shift has allowed us to improve our use and understanding of BAU insights to support the key decisions in our plan. In figure 8 below, we highlight the areas covered by our BAU programme.

**Figure 8 Our BAU insight programme, 2020 to 2025**


Our more focused BAU approach has helped to deliver a number of benefits for us and our customers, and it is structured to be targeted and inclusive across our different customer segments. This ensures we are engaging in ways that best meet our customers' needs. Our key achievements in this space include the following.

- In March 2020, following a trial that started in November 2019, we launched our Cambridge and South Staffs H2Online customer communities. Members take part in weekly activities and provide an informed and engaged two-way dialogue. This helps to shape both our day-to-day decisions and our strategic plans. We have around 150 contributors a year per community. Central to our H2Online communities is our 'You said, we did' feedback loop, which shows how we have taken contributors' views into account. We have expanded our use of this approach throughout our PR24 research programme to improve the engagement experience for customers.
- In December 2020 we implemented the Qualtrics customer survey solution to capture our customers' voices more effectively. This has enabled our insight team to gather more and better quality feedback from customers on their experiences following an interaction with us. It has also helped the team to share more actionable, real-time customer insights with colleagues across the business. This, in turn, has helped to embed a more holistic 'customer first' culture across the business, with direct links to the C-MeX, R-MeX and D-MeX measures of customer experience. Alongside other improvements, this new insight approach helped us move from 10th in the sector for C-MeX in 2020/21 to 4th in 2021/22.
- We also set up a wider range of feedback and engagement channels, such as those run by our education and community outreach teams to track how the end users of these services (harder-to-reach customers, those in vulnerable circumstances and teachers) rate the engagement and collect suggestions on how it could be improved.

- After launching a pilot scheme in our South Staffs region in 2018, we continued to **run our Young Innovators' Panel**, an approach that enables young people aged 16 to 18 to help us solve a business challenged and gain skills that will help them in the future. We convened a Panel in our Cambridge region in 2019 but paused the programme during the COVID-19 pandemic. The Panel returned in our South Staffs region in 2023, where we tasked 25 students to develop ideas for a Key Stage 3 workshop on the value of water (see case study on page 62 for more detail). We will continue with this approach in 2024 and beyond.

- We worked with Turquoise, one of our supply partners to **improve the insights from our customer promises tracker**, which has been running since 2015/16 and which tracks how effectively we are delivering on the promises made to our customers in our business plan for 2020 to 2025. We have improved the key driver analysis to better prioritise our efforts on actions that would deliver a better overall experience for our customers – for example, investing in a new email systems to provide more regular targeted affordability and water efficiency campaigns and advice.

- During the COVID-19 pandemic, we **implemented a more robust and effective approach of regularly reviewing service delivery best practice** across the water and other sectors. This allowed us to quickly spot opportunities to improve the support we offered customers. This included launching a bill checker tool so that our metered customers could understand any changes in their bills caused by the national lockdowns, launching payment breaks and our Assure Assist tariff, and improving our website to better sign post these to customers. We continue to benchmark ourselves against best practice in a targeted way, including using the UKCSI utilities index and CCW's Water Matters survey.

- To help embed a culture of engagement and insight use across our business, we have **run showcase sessions with colleagues to triangulate insights and bring subject matter experts together** to discuss action plans. We have arranged workshops and de-briefs to engage colleagues directly, providing them with insights to inform their own plans to improve services to our customers. Our colleagues also regularly attend customer engagement sessions to observe or take part in conversations with customers directly.

## 4.2 Reviewing the effectiveness of our PR19 engagement programme

**Alongside the improvements made to our BAU research programme, during 2020 we also carried out a review of how effectively PR19 customer engagement had been carried out across the water sector, taking into account what had worked and what needed to be improved. We also looked at other sectors where appropriate to guide the development of our research strategy for PR24. The key steps of this review are summarised below, with more detail in SSC07 'Customer engagement strategy and key insights', submitted alongside this business plan.**

### 4.2.1 Step 1: evaluating the changes in the wider landscape

We carried out a PEST review, focusing on the main political, environmental, social and technological changes that would help shape the development of our engagement programme. We made four strategic changes to our approach, which are outlined in table 5 below. We have continued to monitor the landscape throughout our engagement and will continue to do so to ensure our strategy remains fit for purpose.

**Table 5 The evolution of our customer/wider engagement strategy from PR19 to PR24**

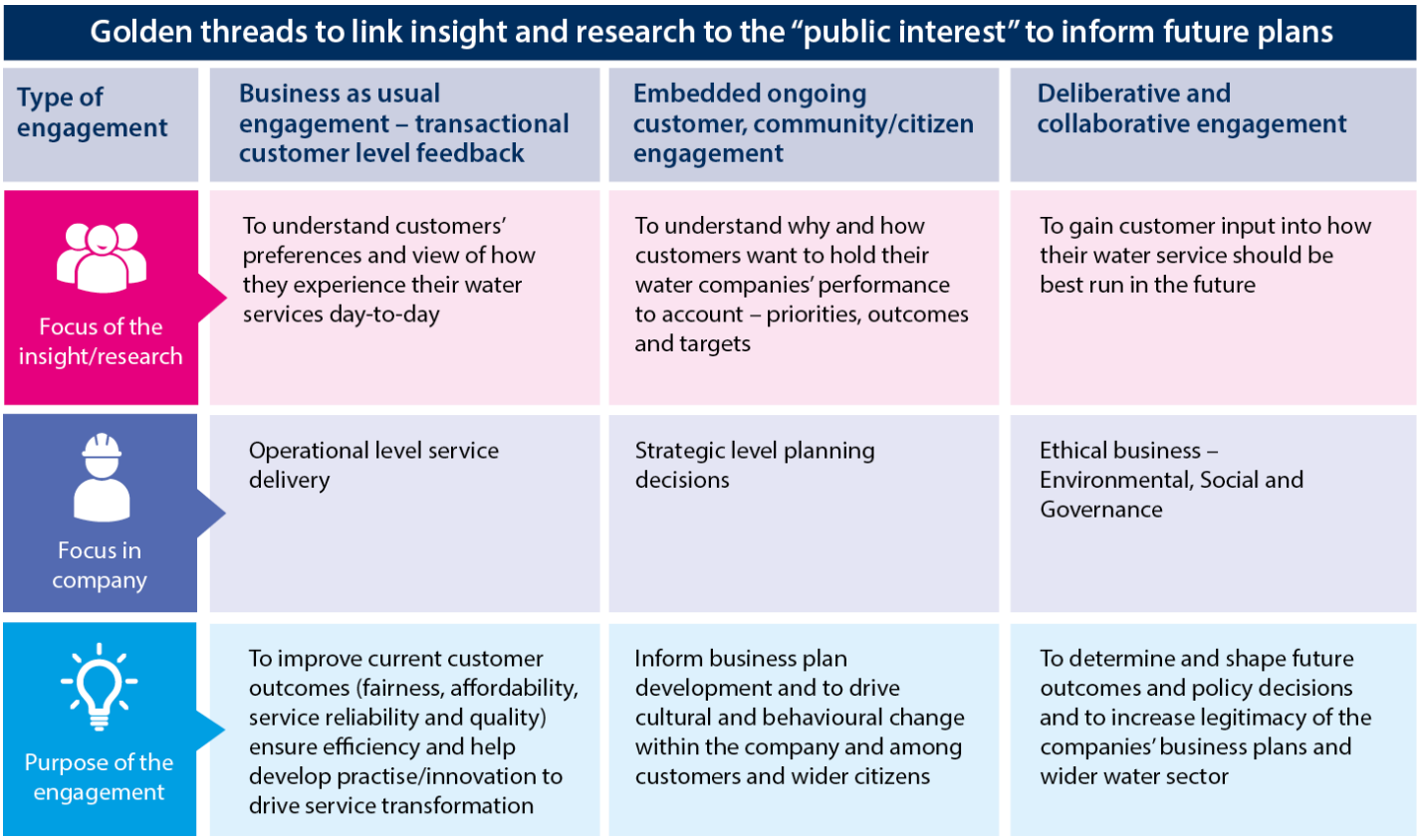
| Key shifts in the macro landscape since 2020 | How we have adapted our PR24 engagement strategy |
|---|---|
| **Changes to UK law and legislation**, including:<br>• the introduction of the Environment Act, with its long-term targets for water companies;<br>• the launch of the UK Government's 25-year environment plan and the National Infrastructure Commission's vision and priorities report; and<br>• the growing need to decarbonise society to mitigate the impacts of global warming. | We have gone further to **fully embed ongoing, two-way engagement approaches** into the heart of our research programme. This is to ensure we engage with customers effectively on more complex topics.<br>We have also rebalanced our programme to make **more effective use of deliberative and behavioural research techniques** to better understand the reasons behind customers' preferences. This shift has allowed customers to be even more involved in the development of our plan, or what we call co-development. Examples include:<br>• our H2Online communities;<br>• our Water Resources Advisory Panels;<br>• our Carbon Net Zero Citizens' Juries; and<br>• the first 'Your water, your say' session, held in June 2023.<br>And we have made use of the COMBI model in the non-household demand club research study and have worked with |
| **Regulatory and wider sector shifts towards long-term planning to meet resilience challenges**, including:<br>• Ofwat's expectation that water companies set their AMP8 business plans within the context of a 25-year LTDS, while also delivering wider social and environmental value;<br>• going beyond our core role of supplying an affordable water supply in response to customers' wishes;<br>• the introduction of five regional water resources planning regions and major strategic resource options to ensure future water demands can be met; and | |

| Key shifts in the macro landscape since 2020 | How we have adapted our PR24 engagement strategy |
|---|---|
| • the move towards more centralised research to ensure the comparability of companies' approaches and outputs. | our partners to develop an improved triangulation approach for insight data.<br>We have embedded an approach to reviewing all our insights to identify **'golden threads'** and to track changes to these over time. These threads are the focal point for decisions made in our plan.<br>In addition, we have made a shift towards **more collaborative working with other water companies** to ensure a consistent approaches to research, access to shared learnings and expertise to the benefit of customers. We have played a key role in the club research projects carried out by both WRE and WRW, which have helped to shape the regional water resources plans. We have also engaged proactively with the national collaborative studies led by Ofwat and CCW, inputting into their design and using the outputs to shape this plan. |
| **Shifting environmental expectations as diversity continues to decline and only 14% of rivers are able to recover if damaged**, including:<br>• a greater shift in our customers' priorities research towards more environmental restoration and protection; and<br>• a raft of legally binding targets on things like leakage, household demand reductions and drought resilience. | |
| **Global shifts in people's everyday lives**, including:<br>• an ageing population, which place more pressure on priority services and the need for innovation to ensure services remain accessible to all;<br>• increased deprivation levels in some communities, putting the spotlight on affordability and the need to offer flexible support and payment options; and<br>• increasing expectations about digital service provision and the use of technology to harness innovation, driving service improvements and delivering efficiencies. | |

## 4.2.2 Step 2: assessing potential new approaches

We carried out a review to assess potential new approaches to guide the evolutions of our customer research and wider engagement strategy. This included taking into account Ofwat's discussion paper on 'PR24 and beyond: Reflecting customer preferences in future price reviews', published in December 2020. In addition, we have drawn on Sustainability First's new public interest model (PIN) and its eight agendas for change – one of which outlines a framework to ensure purposeful engagement and understanding of the public interest. We have specifically structured our engagement programme around three key strands (see figure 9) to ensure a more balanced and targeted approach. In 2022 we became one of the first water company corporate members of Sustainability First and have benefited from its advice as an expert stakeholder – particularly through our Delphi Panel, which has challenged our insights from PR19 and the PR14 valuations research carried out.

**Figure 9 Long-term engagement objectives, based on Sustainability First's PIN model**



We have also drawn on the UKWIR led report, 'How should customer and stakeholder views be used in regulatory decisions?' published in 2021, which provides eight realistic models for applying engagement in decision-making. We have used this framework to ensure a more balanced programme of research and evaluate the best way of engaging more rigorously with customers and other stakeholders on the questions we needed answering to inform our plans. Taking these frameworks into account, we have focused our research on the following three objectives.

- To **shape our future plans**, including our LTDS, to 2050.
- To **improve our existing services**, including making them more accessible, and to co-develop new services for the benefit of our customers and local communities.
- To **improve our overall performance** by gaining insights that will push us to innovate and use best practice approaches. These learnings should come from the water and wider sectors.

### 4.2.3 Step 3: taking a more robust approach to tracking customers' priorities

We think that the best research programmes start with robust priorities research. So, in a step change from our previous approach, in 2020/21 we commissioned Accent and PJM Economics to carry out a comprehensive desk research review and provide us with a series of recommendations for an ongoing programme of qualitative and quantitative research. The report, published in September 2020, focused on a review of:

- our understanding at the time of our customers' priorities;
- methodologies for measuring customer priorities, including a review of research other water companies carried out for PR19; and
- Ofwat's ambitions for PR24, as set out in section 1.3 (see page 19).

This robust review led to the creation of our customer priorities tracker, which we have used widely to help shape our plans. The tracker comprises qualitative research carried out in October 2020 and May 2022, supported by quarterly waves of quantitative research among our household and non-household customers. This has played a key role in directing our research to the 20 areas that our customers have said matter most to them. More detail about our tracker is available on our website.

We then commissioned Accent and PJM Economics to carry out a similar in-depth review to inform the research programme for our Cambridge and South Staffs draft WRMPs. The report, published in March 2021, reviewed customer engagement in the water sector in the context of water resources management planning, among other things, with the aim of developing a set of recommendations to ensure that customers' and stakeholders' preferences were reflected in each draft WRMP. We reviewed the evidence, the areas that worked well and those that needed to be addressed in the context of the new regulatory landscape, particularly with the introduction of the regional water resources planning groups. This led us to develop a local engagement programme, focusing on the following.

- **Strategic choices.** Qualitative and quantitative research on our environmental destination and ambition, levels of service and water efficiency ambition.
- **Decision metrics and weights for options.** Quantitative research measuring preferences for the supply/demand options that customers would like to see implemented, based on their relevant characteristics and used in multi-criteria analysis (MCA) to ensure customer and stakeholder preferences are reflected in the schemes selected by the models.
- **Deep dives.** Qualitative and quantitative research focusing on the areas of our plan that materially impact on customers – for example, universal metering, water transfers and major strategic resource options such as new reservoirs.
- **Final choices, acceptability and affordability.** Qualitative and quantitative research to understand if customers and stakeholders find our plans acceptable, and if not, what would need to change. This stage is designed to ensure the adopted plans are acceptable and affordable to customers, and that they fully reflect their views.

### 4.2.4 Step 4: developing our guiding principles for engagement

We developed a set of eight guiding principles for engagement, which were agreed in April 2021 (see table 6 below). These gave us the foundation for our research programme and helped us to ensure we deliver actionable insights that fully reflect customers' and stakeholders' views. The principles were developed from a comprehensive review of all our PR19 research and engagement, and they are the key reason for us achieving a positive result on the independent assurance review carried out by SIA Partners, a global management consulting business. In its report, SIA used a robust framework to evaluate how effectively our research programme delivered against Ofwat's 'high quality' engagement standards.

**Table 6 Our guiding principles for research and engagement**

| Guiding principle | Rationale behind principle |
|---|---|
| Targeted and meaningful | **Research must be targeted on areas where customers can have a meaningful input and their views add the most value to the business planning process.**<br>We applied this principle to all our decision-making on the topics, while also taking into account any regulatory guidance expectations. We used the CCW/SIA Partners triangulation framework, Sustainability First's PIN model and the engagement models outlined in UKWIR's report to ensure we made careful selections about when to engage, who to engage and how to engage. We also shifted our approach to ensure, where appropriate, we asked people who participated in our research to wear different hats when explaining their preferences – be it as a customer or a citizen of society. This was to help us understand these important differences. |
| Robust and proportionate | **Our primary focus is on delivering high-quality engagement, with an emphasis on quality over quantity.**<br>This is to ensure that the insight is robust and can be relied upon in our decision-making. We have made sure we have robust and regionally representative sample sizes across our quantitative research and that our in-depth qualitative sessions reflect our population served as closely as possible. We also increased our focus on BAU insights to help shape the customer experience alongside our targeted strategic research studies aligned to long-term planning and major policy decisions. |
| Inclusive | **We have made sure that different research methodologies are carefully selected to provide the best experience for all the customers taking part.**<br>We have used mixed methodologies across all key studies, covering a wide range of research techniques. We have also designed our research programme to ensure all customer voices are fairly reflected across our research programme. This includes making sure that those who are digitally disengaged are able to take part in most of our engagement programme. |
| Adaptive | **We have developed a research programme that builds from stage to stage, using the insights that shape the objectives of the studies that follow to ensure a clear engagement journey.**<br>We have captured learnings and made sure the gaps in our insight knowledge are closed. This ensures our engagement approach is continual and moves seamlessly from one AMP to the next. Having dedicated qualitative and quantitative elements means we can build on feedback, adapting our approach as necessary. In addition, using ongoing deliberative research enables us to play back insights to customers, giving us more confidence in the engagement. |
| Customer friendly | **Our customers should enjoy taking part in our research studies, as well as provide considered feedback to the questions we have asked.**<br>We have adopted the recommendations from the CCW/Blue Marble report and have consistently achieved high scores from feedback surveys sent to participants during and at the end of studies. This enables us to keep developing and improving our approach. In addition, we regularly invite members of our H2Online communities to suggest activities and topics to cover – and to choose the charities that are supported as a result of their engagement. This co-development approach is an important driver behind the ongoing success of our online communities.<br>We also take care to ensure all our stimulus materials are clear and free of bias. The independent Stakeholder Challenge Panel has challenged most of our engagement materials and we have worked with CCW on specific projects – for example, our tariff and company-specific adjustment research. This is to ensure we conducted neutrally designed research. |
| Transparent | **To share insights and best practice, we have published all our research reports, triangulation studies and other relevant materials on our website.**<br>We have worked with Impact, our triangulation partner, to develop an improved approach to assessing the different customer and stakeholder voices. In 2023, we appointed SIA Partners to carry out a robust, independent review of our engagement programme and triangulation approach. Our technical auditor Jacobs has carried out assurance to provide confidence that our decisions reflect customers' and stakeholders' preferences. |
| Collaborative | **We have collaborated with customers and stakeholders to ensure they have played an active role in helping us shape our plans.**<br>We have used a co-development approach in some of our studies – e.g. with our Water Resources Advisory Panel to develop our metering strategy. We have also worked with other water companies from the WRE, WRW and WRSE regional planning groups to develop club projects to understand customers' preferences towards strategic resource options. And we have engaged with all the national collaborative studies led by Ofwat and CCW, sharing our learnings to help shape guidance and research design. |
| Ethical | **All our agency partners work to the Market Research Society (MRS) Code of Conduct and follow all data privacy and GDPR legislation.**<br>We carry out yearly audits to ensure compliance and subject all suppliers to an end-of-project review to capture learnings and help improve subsequent research studies |

### 4.2.5 Step 5: developing our customer research journey for PR24

We identified our customers' short-term priorities from 2025 to 2030 and also their longer-term views to 2050. This helped to inform our decisions on the ambition of our LTDS. We also carried out extensive research with customers and stakeholders to ensure their preferences shaped our water resources plans at a local and national level. And we explored the value our customers place on difference service improvements through our willingness to pay study and the Ofwat-led ODI rates study. Once our proposed plans and a least cost option were developed, we used Ofwat and CCW's mandated guidance to carry out acceptability and affordability research, alongside our first 'Your water, your say' session in June 2023, to assess customers' views and what changes we needed to make to our plans to ensure best outcomes.

In addition, we have carried out work to reshape the customer experience, with a specific focus on improving our:

- affordability options;
- digital services;
- metering customer journey; and
- engagement with non-household customers around demand management.

Key to this is defining the promises to which our customers and stakeholders will hold us to account. This includes preferences on how to phase investments to deliver our long-term ambitions and on how we should deliver our net zero commitments.

Our approach for PR24 builds on that used for PR19 and brings together all our insights and data to generate a more balanced view of customer preferences. It is outlined in figure 10 below.

**Figure 10 Our customer research journey to inform PR24**


## 4.3 Implementing our customer research journey

**We have learned the lessons from our PR19 research and wider engagement programme and have taken into account the constructive challenge we have received from the independent Stakeholder Challenge Panel. This has enabled us to implement improvements to our PR24 engagement programme to ensure it is more effective, representative and drives meaningful change.**

In this section, we summarise how we approached our engagement to ensure the best outcomes for customers, society and the environment. This means making sure we ask the right people the right questions and in the right way. It also means taking action on the learnings, using insight triangulation in an effective way. This is essential if we are to ensure the right outcomes at the right price and the right time for customers. Our engagement strategy describes our approach in more detail.

### 4.3.1 Who we engaged

Our approach is about using dialogue to give us a fully rounded view of our customer and stakeholder preferences. In each research study report, we have detailed which groups have participated. We summarise below.

- Current household customers, including representation by age, gender, socio-economic groups (including household income), life stages and attitudinal segmentation. We have also used targeted sampling to make sure we reached a wide range of customers in vulnerable circumstances (both financially and from a health perspective), those who have been traditionally harder to reach (for example, those from minority ethnic backgrounds) and those who are digitally disengaged or unable to participate in online research studies or other online channels, such as social media.
- Non-household customers, such as small- and medium-sized businesses, large corporations and organisations that rely on water to enable them to carry out their day-to-day operations.
- Future household customers aged between 16 and 25, who do not currently pay a water bill directly to us (Generation Z and Generation Alpha).
- Wider citizens and users of our services, but who do not pay a water bill directly to us.
- Across all our studies we have also taken great care to ensure those customers who have suffered a service failure (for example, water supply interruption, flooding, low pressure, water quality notice, or a problem with their bill) were included.
- Non-household business market retailers, which buy water from us on behalf of their end business customers and provide a range of retail services such as billing, meter reading and handling customers' service queries.
- Developers, SLPs and NAVs.
- Community and customer organisations and advocates, including CCW, Citizens Advice, local Chambers of Commerce, environmental organisations, local government, and housing associations.
- Regulatory bodies, including Ofwat, the Environment Agency and the DWI.

## 4.3.2 Approaches we used to engage

To ensure we heard from as many voices as possible in a way that would enable customers and stakeholders to engage in a way that would best suit their personal circumstances, we used a number of different approaches. For each research study, we often mixed these approaches and provided our independent research partners with a detailed brief to help them determine the best way to structure the study. During the COVID-19 pandemic we were unable to engage with customers face-to-face, but continued to use off-line methodologies, such as by phone, where appropriate. Once the pandemic restrictions were lifted in 2021, we returned to holding face-to-face engagement sessions again, alongside our online engagement. This is to ensure we could reach all our customer voices. The approaches we used included the following.

- Short and in-depth phone interviews and surveys, including for C-MeX, D-MeX and R-MeX.
- Online surveys, both short customer satisfaction surveys and 20-minute in-depth studies.
- Deliberative online research panels, Citizens' Juries and our H2Online communities, often running over an extended period of time.
- Deliberative focus groups, all- and half-day workshops and other events, such as our first 'Your water, your say' session held in June 2023.
- Co-development sessions, with customers and people from across the business coming together to discuss views and ideas. These ranged from three-hour workshops to all-day sessions.
- One-to-one in-depth interviews with hard-to-reach customer groups.
- Online roundtable meetings and stakeholder forums.
- BAU events and community activities, including ongoing activities at our community hub.
- BAU insights, including social media listening and analysis of day-to-day customer contacts and complaints.

## 4.3.3 Our approach to insight triangulation

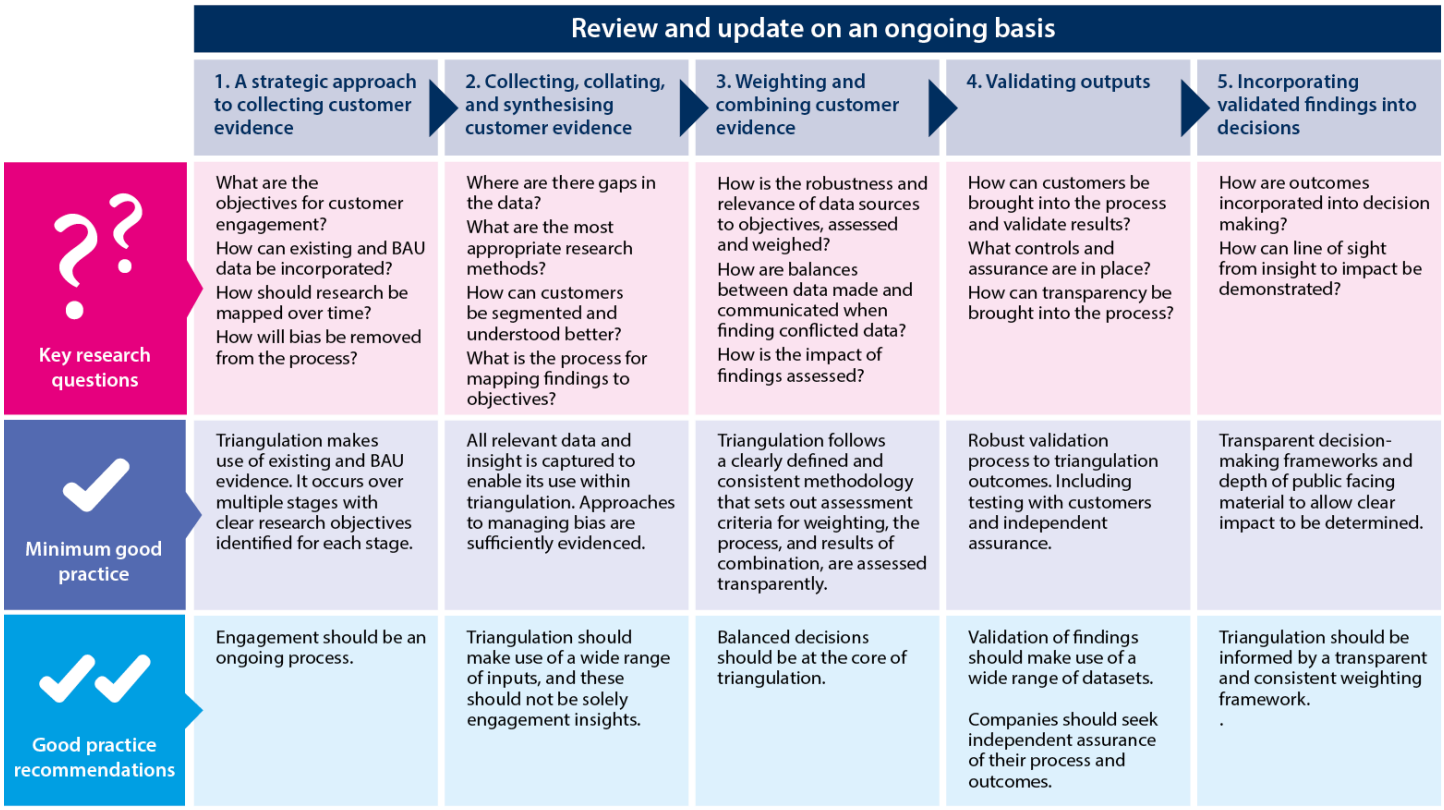
At the heart of our research and engagement journey sits an approach towards triangulating all the insights we have gained. Our objective with this approach was to gain feedback from the customers and stakeholders who will be directly impacted by our plans. We also wanted to:

- develop an approach that tracks how preferences and views change over time, driving the direction and scope of the research carried out and enabling us to adapt the framework over time;
- triangulate between a range of high-quality insights and research methods to avoid over-reliance on any single source of evidence;
- evaluate assumptions and uncertainties to take a balanced and rounded view of the evidence base. This includes, for example, using a red, amber, green (RAG) weighting approach to assess the validity of each data source and take into account the strengths and limitations of each insight source; and
- make use of a wide variety of insight sources, including insight from our own studies, collaborative studies in which we have taken part and those from wider reports commissioned by other water companies and organisations such as UKCSI.

We have built on the approach we used at PR19, using the best practice framework put forward in the CCW/SIA Partners triangulation report, We agree that the recommendations in the

framework provide a structured and robust approach, but still allows us to put forward innovative ways of triangulating insights. The CCW/SIA Partners framework is shown in figure 11 below. We explain each step of our approach in more detail in section 1.2.3 of SSC07 'Customer engagement strategy and insights strategy'.

**Figure 11 CCW/SIA best practice triangulation framework**




Source: CCW/SIA Partners.

Effective triangulation requires specific expertise. So, we have drawn on the support of Impact, our independent triangulation partner. The outputs we commissioned them to deliver include:

- a thematic review of all the relevant insight material covering a range of areas critical to the decisions made in our business plan, as set out in the SSC11 'Thematic analysis report'.;
- a robust review of the open source data and our BAU research findings to help give us a view of our household and non-household customer demographics in our Cambridge and South Staffs regions, as set out in the SSC13 'Demographics report'.
- a robust and proportionate evidence base on customers' willingness to pay for different areas of investment, using a wide range of inputs to produce a range of valuations across 12 different service attributes. See SSC09 'PR24 technical triangulation – phase 2 results' for more detail about how we have used the valuations; and
- developing a robust decision-making framework model for our LTDS. The approach to develop the model is detailed in SSC33 'Impact – SSC LTDS triangulation report'.

In table 7 below, we outline some of the improvements we have made to our triangulation approach since PR19, evolving our approach to adapt to the changes in our strategy and the CCW/SIA Partners best practice framework.

**Table 7 How we have improved our approach to triangulation at PR24**

| PR19 approach | Improvements made at PR24 |
|---|---|
| We developed a robust approach, drawing on the one set out in 'Defining and applying triangulation in the water sector', published by CCW/ICF in 2017. Our triangulation approach followed six key steps ('SMARTS').<br>• **Screen** data sources to identify those with potentially comparable measures.<br>• **Map** non-core evidence to core measures where possible to enable comparison.<br>• **Assess** theoretical and statistical validity of the resulting measures.<br>• **Rate** measures as red, amber, green (RAG), depending on how well they perform with respect to the validity measures.<br>• **Triangulate** to conclude on the values to take forward based on applying RAG weights to obtain central values and ranges.<br>• **Sensitivity** test the results based on amending the weights to conform to alternative reasonable perspectives. | We have updated the SMARTS approach used at PR19 to reflect the CCW/SIA Partners best practice framework.<br>Crucially, given our increased use of deliberative and wider qualitative research at PR24, we have made an important shift in how we have assessed each insight source. This centres on adding depth as a third dimension of validity.<br>'Depth' relates to the quality and detail of information given to survey participants and the level of discussion and education that contributed to participants' views. The aim is to encourage greater consideration of qualitative sources.<br>While these will not normally provide numeric values comparable to those provided by quantitative sources, they often give more confidence that issues have been covered in sufficient depth for customers and citizens to express an appreciably different opinion. |
| At PR19 the weighting and combining of customer evidence into preferences and values relied on the judgement of a single expert reviewer. | To strengthen this important aspect of the triangulation approach – and to make sure the triangulation approach of the valuations that are used in our cost-benefit analysis for PR24 was challenged effectively – we formed a stakeholder 'Delphi' panel. The Delphi model is a long-established method for drawing together expert opinion in a focused and independent way.<br>Across two waves of engagement, the focus of the panel was to assess:<br>• the appropriate willingness to pay value to use for each service attribute in our PR24 investment appraisal; and<br>• the appropriate range of values to test around each of these central willingness to pay values.<br>This was a new way of engaging for us and we worked with Impact to recruit participants from the following disciplines.<br>• A customer engagement expert from the energy sector.<br>• A technical expert in the field of stated preference research and willingness to pay estimation.<br>• A representative from the independent Stakeholder Challenge Panel.<br>• Two representatives from Sustainability First (working together as one).<br>We have published a report alongside this plan that covers the approach and all the findings from the Delphi Panel. See SSC10 'PR24 technical triangulation – application of the Delphi method'. |
| We provided thematic reviews of a range of areas shown to be high priority to evidence how we had compared and contrasted all the insight available. Our insight team carried out these reviews. | We have improved our approach to thematic reviews, including:<br>• widening the scope of the reviews to reflect priority areas at PR24 now identified as important, with a specific focus on those that deliver public value – e.g. insights relating to delivering environmental ambition, improving communities and reducing carbon emissions; and<br>• taking on board the assurance feedback from SIA Partners to ensure we had a clear narrative highlighting the differences between things like customer priorities versus stakeholder views, current customers versus future customers, and those who may find themselves in vulnerable circumstances. |
| Our PR19 framework was peer reviewed at two points to provide robust and independent challenge. Professor Giles Atkinson carried out this work. | To provide a more rigorous approach to peer review, we asked Impact to work independently with Professor Iain Fraser from the University of Kent to challenge the design and implantation of the triangulation for our willingness to pay and LTDS research.<br>This end-to-end peer review has resulted in us making a number of refinements and improvements, including how we approached engagement with the Delphi Panel. There is a detailed log of the peer review challenges raised and Impact's response to these in SSC08 'PR24 technical triangulation – phase 1 methodology'. |

As well as the peer review, and to provide further confidence in our approach, in June 2023 we commissioned SIA Partners to assure our approach to triangulation and use of insights. SIA's robust approach is outlined in SSC14 'SIA assurance report', published in September 2023. The outcome of this review is shown in figure 12 below; it shows that we have developed a framework that adheres to best practice guidance.

**Figure 12 Outcome from SIA Partners' independent assurance of our PR24 triangulation and use of insights**

Findings from the assessment of the assurance approach

South Staffs Water's triangulation approach was assessed against each component of CCW's framework and given an RAG scoring across each element.

| Area | Evidence of South Staffs Water's triangulation methodology |
|---|---|
| 1. Engagement and triangulation should be an ongoing process | |
| 2. Triangulation should make use of a wide range of inputs, and these should not be solely engagement insight | |
| 3. Triangulation should be informed by a transparent and consistent weighting framework | |
| 4. Balanced decisions should be at the core of triangulation | |
| 5. Validation of findings should make use of a wide range of datasets | |
| 6. Companies should seek independent assurance of their process and outcomes. | |

South Staffs Water have provided detailed insight into their PR24 triangulation process. As demonstrated by the scoring in the table above, it is Sia Partners' view that South Staffs Water have clearly shown how their triangulation methodology draws from various approaches and frameworks, including CCW and other recent, best-in-class work by utility companies. The result is a clear, logical and structured approach.

## 4.3.4 Organisations that carried out our research programme

The quality of the insights gained from our research relies to a large extent on working with partners that have expertise, experience, robust and ethical processes, and a collaborative working culture. We have embedded a new approach to collaborating with our research supply chain, which has played a key role in delivering our PR24 customer research programme. In 2020 we set up a dedicated PR24 framework to replace the one used for commissioning work at PR19.

To establish the framework, we followed a full OJEU procurement process and held three detailed evaluation review stages. The independent Stakeholder Challenge Panel also challenged our process. At the end of the review stages in March 2021 we awarded contracts to seven suppliers to deliver our PR24 research programme. The approach we have taken goes further than what we did at PR19 and has included:

- holding meetings to discuss our vision for the wider research programme;
- providing regular updates on key projects coming up and key insights emerging from across the research studies taking place, to enable better planning; and
- putting in place a 360° review process to ensure that we and our suppliers were able to discuss what was working and what could be improved.

We view the framework as a success for the following reasons.

- We have a strong group of partners that, as well as being experts in the water sector, also work with other sectors. This brings learning into our business. It also meant we received different proposals in response to a brief, including the use of different methodologies, which widened our understanding.
- All but two of the projects put into the framework received two or more bids to enable a competitive tender to take place. Where that was not possible, we used external benchmarking to give us confidence that a better option was not available in the wider market.
- We delivered our research programme on time and to budget, with the exception of the acceptability and affordability testing research. This is because adhering to the guidance led to an overrun against the estimated cost of carrying out this research (based on PR19 costs, plus 10% inflation).
- All our partners shared reports as the programme progressed to ensure they were aware of key insights that would shape the next project. On some projects, they also reviewed each other's materials to ensure alignment between the qualitative and quantitative elements.
- All our partners engaged successfully with the independent Stakeholder Challenge Panel and other organisations challenging the research projects, providing detailed responses.
- There were no disputes between partners when working collaboratively and no breaches on contracts during the programme.
- In our qualitative research we did not receive any formal complaints relating to GDPR or wider data privacy concerns and our quantitative survey opt-out rate was below 1%. This demonstrates that our partners always worked to the appropriate research guidelines and in an ethical manner.

In table 8 below, we list the partners who helped us deliver our research programme. This list does not include the suppliers used on the regional club projects for our draft WRMPs or other national studies.

**Table 8 Independent specialist research partners**

| Supplier partner | Key areas of focus |
|---|---|
| Accent | Priorities research, covering PR24 and associated desk research reviews; working in partnership with PJM Economics.<br>WRMP quantitative research elements (two studies); working in partnership with PJM Economics.<br>PR24 affordability and acceptability research, following Ofwat/CCW guidance. |
| Blue Marble[1] | Young Innovators' Panel (BAU). |
| Community Research | WRMP Water Resources Advisory Panel (WRAP) qualitative research elements. |
| Explain Research | Net zero carbon – Citizens' Juries in our Cambridge and South Staffs regions.<br>H2Online communities in our Cambridge and South Staffs regions (BAU). |
| Impact Utilities | Triangulation partners; delivering all technical triangulation work relating to valuations research (including facilitating the Delphi Panel), LTDS decision-making framework and robust thematic reviews covering insights to support decision-making for important areas of our plans.<br>Company specific adjustment research. |
| Qa Research | PR24 willingness to pay research; working in partnership with NERA Economic Consultants.<br>PR24 tariffs research. |
| Qualtrics[1] | Voice of the customer point of contact customer satisfaction surveys (BAU). |
| Turquoise Thinking | WRMP affordability and acceptability testing (two waves).<br>LTDS research.<br>Household customer segmentation development (BAU).<br>Customer promises tracker (BAU). |

Notes:

1. BAU research partners not on the PR24 framework.

Box Clever is a research partner on the PR24 framework, but has only bid for one study and was not selected as preferred supplier.

# 4.4 What we have learned through our research and engagement programme

**All good plans are built on strong foundations. We designed out research programme to provide a robust view of where our customers and wider stakeholders wanted us to invest, including a specific focus on understanding the preferences to inform our Cambridge and South Staffs WRMPs and the WRE and WRW regional water resources plans.**

## 4.4.1 Customer priorities

We provide a thematic review of our customers' priorities for PR24 and our long-term plans to 2050 in SSC11 'Thematic analysis report'. This review draws on a wide range of insights from both our own research studies, and wider BAU programme alongside wider industry studies, including those carried out a national level.

Our customers have told us clearly what the important areas are that our plans need to reflect – and how important each is relative to one other. We started engaging with our customers about their priorities in October 2022, through our customer priorities tracker (see step 3 above). Following the first qualitative stage, we then ran a quantitative study among household customers using a Max-Diff approach to generate a priorities hierarchy across the areas identified from the qualitative discussions and wider BAU insights. Following the first wave of quantitative research, 20 priority attributes were identified. We have subsequently tracked these on a quarterly basis, with an additional wave of qualitative discussions with household and non-household customers taking place in spring 2023. This did not reveal any material shifts in our customers' priorities.

Figure 13 below summarises the priorities our customers want us to focus on. We engaged with our H2Online communities in 2021 to review a first draft based on the insight from the priorities trackers so they could help ensure the language was clear, accessible and meaningful to customers. The infographic has evolved over time and we will continue to run our customer priorities tracker to ensure it remains an accurate view of the things that matter most to our customers.

Our in-depth analysis of the customer priorities tracker and wider insights also reveals where specific customer segments attach significantly higher priority, which we have considered in our plans. These include the following.

- Those on lower incomes and social grades who are financially vulnerable, placing more emphasis on us providing targeted financial support.
- Customers who want a more transactional, efficient relationship with us prioritise billing accuracy more, to remove the need for them to have further contact with us.

- Customers who want a more transactional, efficient relationship with us and who are under the age of 35 place more priority on receiving timely and clear incident notifications when there is an issue with their water supply.
- Customers who are community focused and care more about the environment attach greater priority to protecting water sources.
- Customers with medical conditions who rely on water and non-household customers prioritise investments that reduce the chance of them being impacted by supply interruptions, given the affect these can have on their daily lives.

At a regional level, although there are no significant differences, customers in our Cambridge region tend to give more priority to environmental attributes – for example, reducing leakage, sustainability initiatives, and protecting water sources from over-abstraction and pollution.

What did emerge is that there are two 'super hygiene' priorities where the importance customers attached to these in the Max-Diff trade-off exercise and feedback from in-depth discussions warranted setting them apart in a separate category. These priorities relate to:

- 'offering a reliable, high-quality supply of water'; and
- 'ensuring water bills remain affordable for all'.

Customers are very clear that if we do not deliver these, we have failed in our primary duty as the provider of an essential public service.

**Figure 13 Our customers' priorities for PR24 and the longer term**

**Essential/expected service**

- Consistently excellent water quality
- Continual water supply and pressure
- **Affordable and stable bills for clean water**
- Minimising leakage through pipe repair and investment
- Accurate and informative bills
- Efficient, real time, customer service
- Good communications during incidents – e.g. when the water goes off as a result of a mains burst
- Support for customers in vulnerable situations who need financial support and/or extra help to access services
- Addressing the impact of climate change, including planning long term to meet future demands – to make sure water always comes out of customers' taps
- **Addressing the impact of limescale caused by hard water**

**Enhanced service**

- Ongoing innovation in improving and maintaining infrastructure – pipes, pumping stations, reservoirs
- Running a sustainable business – e.g. carbon neutral ambitions and removing single-use plastics from business operations
- Good responsive website and mobile phone app
- Investing in projects that help to protect the environment
- **Full smart meter roll-out programme, so customers can receive regular information and comparisons about their water usage to help control how much water they use**
- Investing in rainwater harvesting technologies
- Offering financial incentives and initiatives to help customers save water in the home/garden
- Teaching school children about the value of water

**Looking to the future 2050 – essential/expected service**

- Use of innovative technology to predict problems and/or quickly fix pipes, treatment works and pumping stations, to reduce wastage of water – e.g. use of artificial intelligence
- Competitive market – freedom for household customers to choose their water supplier
- Community water recycling schemes to better share resources
- **Smarter, dynamic pricing of water – such as a lower rate for using water during off-peak times**
- New generation of low water use, smart products and services – e.g. no flush toilets, systems that can predict usage to help lower consumption
- Providing customers with more information on their water supply – e.g. the health of water sources, including how full reservoirs and underground sources are

**Going above and beyond**

- Volunteering scheme for staff to support community initiatives, sponsorships/grants for community organisations
- Running community initiatives – e.g. planting trees, working in partnership with local businesses to support community projects

**Engagement and COVID-19:** While these responses received during 2020 and 2021 reflect the impact of the pandemic on society and themselves, customers were also able to look past these impacts into the future to provide a balanced view.

**Note:** The insights summarise feedback from ten in-depth focus groups with 44 household customers from all walks of life and five one-to-one interviews with customers in vulnerable situations in October 2020, with a further four focus groups and five one-to-one interviews carried out in May 2022. Customers from different sized businesses also took part. Since December 2020 to March 2023, a representative set of more that 2,600 household customers have completed an in-depth survey to validate the results. When reviewing these insights, please bear in mind that some customers will put greater priority on specific areas compared with others. So this is a combined view of the areas on where customers place the most priority.

**The bold text represents those priorities that have become more important to customers since 2020.**

The impact the water sector has on the environment features highly in public consciousness. Even though we are a clean water only company, we still see the environment featuring highly in our customer priorities.

Sour customer priorities tracker findings between 2020 and 2023 show a steady increase in the priority weighting attached to the environmental areas we track. But we have found slightly less priority attached to sustainable business practices over this period. Despite this, the environment still maintains a consistent level of importance among customers, especially in terms of protecting water resources, saving water and water recycling. This is particularly true in our Cambridge region, where we continue to see customers attach a higher level of

priority to making investments now, compared with keeping bills low.

Despite this, throughout the COVID-19 pandemic and the cost-of-living crisis, there has been a relative shift in prioritisation of environmental concern in favour of other more immediate priorities in the short term. This shift became more pronounced in 2022 as the impact of the cost-of-living crisis was starting to influence customers' preferences. For example, in the second wave of our customer priorities tracker qualitative discussions, a majority of customers said that while the environment is taken more seriously than ever before and understood better, it has become a longer-term issue and is dwarfed by short-term, personal economic concern.

The idea of seeing environmental concern through the lens of another issue is also seen in other research studies. For example, where environmental issues are discussed, the strongest support from household and non-household customers is often a scenario where water security is put at risk, thereby focusing on an issue that directly impacts them as consumers.

Overall, during the first three years of the current AMP, environmental concern has transformed from a core concern for investment now to a longer-term issue. This transformation appears to be mainly due to a rise in financial concerns appearing between 2020 and 2023.

But when customers are informed about the decline in river health and biodiversity, they are clear that the environment cannot be ignored and that investments need to be made to prevent any further deterioration. This is particularly true for our future customers. It was also reflected in the support for environmental enhancement investment shown to customers in our business plan acceptability and affordability research (see chapter 5). In more recent studies, a concern for the environment is still present, although it is often seen through a financial lens.

We discuss this in more detail in chapter 7 of SSC11 'Thematic analysis report'.

We have carefully considered this tension between customers wanting to see environmental improvements while making sure our bills remain affordable in our plans. We have addressed this either by securing third-party funding to enable investment or looking at how we phase our delivery to manage the impact on customers' bills. We discuss this in more detail in section 3.2 above, but two examples include:

- phasing our WINEP over two successive AMPs, so that we can deliver the improvements our customers expect to see delivered while enabling a more gradual bill increase over time; and
- working collaboratively with the Imperial War Museum in our Cambridge region on a heat exchange system, whereby heat taken out of the water is used to power the site. In return, the museum is contributing to our PEBBLE biodiversity fund, enabling us to support more local projects to enhance the environment.

### 4.4.2 Our 'golden threads'

Following the completion of our first WRAP online forums in August 2021, Community Research carried out a thematic review of all the feedback from customers who took part. This review revealed four clear 'golden threads' that underpinned the preferences customers expressed about the topics covered in the WRAP, such as:

- universal metering;
- our environmental destination; and
- the balance of supply- and demand-side options.

This was to ensure resilient water supplies to meet future demand.

We then reviewed these four threads against the feedback from our customer priorities tracker qualitative insights from autumn 2020 and other insight sources. This revealed a strong consistency across the insights supporting these threads. In September 2021, the business agreed these four threads as the basis of driving decisions in our AMP8 plans. Since then, we have tracked them through the main research studies carried out during the remainder of our research programme. In particular, we have assessed whether they are getting weaker or stronger over time in terms of how they are influencing customer preferences, or if they staying consistent.

To help enable this tracking, we have worked with our research partners to ensure we picked up any emerging threads and to understand the drivers for these. In February 2022 we picked up on the impact the cost-of-living crisis was starting to have on our customers when expressing their preferences for different investments and decision points in our plan. We adopted this as a fifth thread in our research programme in April 2022, after it was clear the cost-of-living impact was getting stronger. We have also worked with Impact, our PR24 triangulation partners, to summarise the key insights from all the thematic reviews carried out in the context of all five threads. Impact has also analysed our research data. See chapter 4 of SSC11 'Thematic analysis report' for more information on how the relative strengths of these threads have changed between October 2020 and September 2023.

The 'golden threads' form the basis for the key decisions we have made in our plans to ensure we can understand the preferences our customers are expressing. We summarise these in table 9 below.

**Table 9 The 'golden threads' that have informed the decisions in our AMP8 plans**

| Golden thread | Specific themes driving the thread | Strength of thread |
|---|---|---|
| Transparency and engagement to help customers understand the context and any impact of any proposed changes to their water services and the role they can play in ensuring the best outcomes | Most customers want regular and effective engagement to help them understand the need for investment decisions and how these impact on their water bills and any policy changes.<br>Customers who took part in our research consistently suggested that if changes to our policies and plans, such as bringing in universal metering, are to be accepted by the broader customer base, effective engagement and education will be needed to prevent dissatisfaction with their water services.<br>As the challenges facing us become more widely known and customers become more informed, it increases the need for engagement to educate and support on the actions we need to take. | This was notable at PR19, but was accelerated by the COVID-19 pandemic, climate change impacts and then the cost-of-living increases.<br>This thread has remained consistent throughout the PR24 research programme. |
| A focus on fairness and collective action to meet water sector challenges | Policies that are seen to be 'fair' to all customers, particularly those in vulnerable circumstances, are important.<br>As customers become more informed, calls grow for collective responsibility to tackle the scale of the challenges we face to maintain water supplies and when tackling affordability challenges. | This thread has stayed consistent throughout the PR24 research programme/ |
| Concern for the environment, specifically the water environment | A consistent thread since 2018 and growing notably in importance by 2021 – in part, as a result of the publicity around COP26 and the growing awareness of the impacts on climate change on public services – e.g. more floods and prolonged periods of drought.<br>The theme has been further highlighted by negative reports about the water sector in the media – from sewage pollution to a perceived lack of improvement in leakage levels.<br>There is a clear view that water companies need to play a stronger role in restoring and protecting the water environment. | This thread has consistently been a high priority for our customers. But since early 2022, it has been pushed by customers into a long-term priority because of concerns over the cost-of-living crisis and household bill affordability.<br>Environmental stakeholders continue to push strongly for increased investment now, as do a minority of customers who are concerned that actions need to be taken now to prevent further damage to the water environment. |
| The need to protect vulnerable customers | This thread emerged as a result of the COVID-19 pandemic, with spontaneous calls to protect customers in vulnerable customers that was not seed widely at PR19.<br>The evidence for this comes from the majority of customers still supporting the need to subsist bills for households that are struggling and the need to ensure accessible services for all. | This thread has weakened slightly since early 2022, as most customers have turned to look inwards at their own situation as bills become less affordable for all households.<br>But cost-of-living increases have kept this thread at the forefront of customers' minds in terms of the need to support those struggling the most and to be aware of those who might be needing support for the first time. |
| Affordability and cost-of-living increases impacting on customers | This thread emerged in early 2022 as customer preferences started to become for influenced by the pressures on household bills. This caused many customers to consider their own situation and the investments they want to see us make in their water services.<br>It has constrained many customers' ability to look beyond the next few months when assessing the affordability of our plans | This thread has remained consistent into 2023, with a slight increase as prices and interest rates have continued to rise.<br>But for many customers, their water bill remains of least concern in relation to their overall financial situation. |

## 4.4.3 Engaging customers and stakeholders to inform our water resources management plans

Following the completion of the first wave of our customer priorities tracker in April 2021, we used the insights from this and the recommendations from the detailed desk research review carried out by Accent and PJM Economics (see section 4.2.3, step 3) to help inform the strategic research objectives and our engagement programme for the WRMPs for our Cambridge and South Staffs regions.

We have carried out our most extensive customer and stakeholder research programme ever to underpin our WRMPs. We also worked collaboratively with the other water companies that are members of the WRE and WRW regional planning groups to conduct research that ensured the consistency of our approach. The programme has taken account of the views of over 4,100 customers and more than 30 stakeholders across our two supply regions. We have worked collaboratively with a range of research partners to ensure the engagement is "high-quality".

- **Accent Research/PJM Economics, Community Research and Turquoise Thinking** carried out research studies to inform our WRMPs.

- **Accent Research/PJM Economics and Blue Marble** conducted club projects to inform the WRE and WRW regional plans.

- **Accent Research/PJM Economics and Britainthinks** carried out two research studies to support our decisions for the Fens reservoir strategic resource option.

We set out all our local and regional collaborative research study reports and supporting materials in our PR24 resources library (see the WRMP sections).

Our WRMP research programme focused on engaging around the four key themes as outlined in section 4.2.3, step 3. The fieldwork for this programme started in summer 2021 and ran through to September 2022 to support the submission of our draft WRMPs for our Cambridge and South Staffs regions.

Each stage of the programme was carefully designed to build on the previous stage to provide a clear line of sight from preferences, through to acceptability and affordability testing of our two draft plans. We are currently in the process of conducting a second wave of acceptability and affordability testing of our final WRMPs to continue our engagement with customers. The key studies from this programme include the following.

- **Running a year-long deliberative WRAP forum with a diverse set of customers and future customers, and with one WRAP running in each of our supply region.** The aim was to engage participants on a range of topics related to water resources management planning. This approach, over four separate engagement sessions, provided us with a rich seam of insights to understand in depth the reasons for our customers' preferences and to help inform policy decisions. We explain more about our WRAP forums in section 1.7 of SSC07 'Customer engagement strategy and key insights. Outside of our H2Online communities, this was the first time we had run a focused customer panel over such an extended period. We found that this approach gave us the opportunity to use follow-up questions to the same customers to explore their responses and check key findings back with them, improving our confidence in the outputs and whether they agreed with the wider consensus of views or not.

- **Running three quantitative studies to validate the insights gained from our WRAP, with a regionally representative and robust set of customers.** These studies have provided a clear understanding of customer preferences, which is vital to informing our decision to roll-out universal metering, our leakage reduction ambition and to inform the level of environmental ambition in our WMRPs and PR24 plans. One of these studies was designed by Accent/PJM Economics to inform our multi-criteria decision analysis process for selecting options for the plan, and focused on exploring:
  - customers' attitudes and views about the natural environment and our approach to planning;
  - customers' ranking of our water supply options to meet demand over the next 25 years; and
  - customers' preferences for WRMP options to obtain weights for multi-criteria decision analysis metrics.

- **We also engaged with informed stakeholders through facilitated roundtables to encourage a more informed debate on the topics discussed with customers.** These were facilitated by our independent partners Community Research. We followed these by holding a workshop with six large business customers in our Cambridge region. This session discussed the barriers and best approaches to enabling water use reductions and helped to inform the key areas of focus for a later regional club project into non-household demand reduction strategies.

At a regional level, we have engaged collaboratively with other water companies in the WRE and WRW regional planning groups. This allowed us to share expertise, resources and the fixed costs associated with delivering robust customer research into understanding preferences for two key areas related to the development of strategic resource options. Both studies were designed to fill gaps in our knowledge – they were multi-stage, covering desk research reviews of existing research, to inform a robust programme of qualitative and quantitative insights. The outputs have provided insights to shape the development of the Fens reservoir scheme through the RAPID process. The collaborative approach ensured consistency of methodology, sampling and the stimulus materials shown to customers across the different supply regions to enable the outputs to identify any differences and included the following.

- **A study to fully understand customers' willingness to pay for 'added value' investment as part of major infrastructure scheme**, like a new reservoir, and what the balance should be between the different types of value; such as local jobs and apprenticeships, leisure, education facilities and carbon sequestration.

- **A study to have confidence that water companies understand how customers interpret and respond to the different water source changes that may form part of the strategic resource options** under development to secure water resources in the East and South East of England. It also focused on developing a best-practice communications framework for communicating any water resources changes to customers and other citizens, given the potential impacts of changing the water supply. This is particularly important in our Cambridge region, given the proposed switch from an underground chalk aquifer supply to one that includes supply from a new surface water transfer and reservoir.

Alongside research to inform the strategic resource options, we have also been active in a series of collaborative research studies run by our research partners Blue Marble to:

- inform strategic decisions in the WRE regional plan, including preferences for best value planning objectives, priorities for environmental ambition, preferred balance of supply and demand options and intergenerational fairness. This study, completed in 2021 focused on household, non-household customers and other citizens, including future customers;
- inform the development of strategies to reduce water consumption in the non-household market. This study engaged collaboratively with non-household retailers, before concept testing the ideas generated with a range of business users to assess reaction and preferences. The findings were shared with Ofwat and other regulatory and interested stakeholders at a workshop to discuss how to break down the barriers to reducing consumption identified in the research; and
- conducting a ten-week longitudinal study using data loggers and regular decision checkpoints to understand household customers' outside water use at home and to help develop initiatives and communications to encourage water saving behaviours during hot weather.

To showcase how we have used these and other insights to inform our plans, see SSC11 'Thematic analysis report'. We have also summarised the key insights and how these have informed our plans in section 1.8 of SSC07 'Customer engagement strategy and key insights'.

We have also worked collaboratively with the other water companies in WRE and WRW to triangulate all the WRMP insights and provide a robust view of customer and stakeholders preferences to inform the regional plans. These comprehensive reviews cover the key areas where we have engaged and both triangulation studies methodologies follow the best practice principles from the CCW/SIA Partners report. The insights can be accessed through the following reports.

- **We commissioned Impact Research to independently triangulate our WRMP insights to inform the WRE regional plan.** In total, this triangulation process includes insights taken from 76 reports. The final report can be found on our website.

- **We commissioned Shed Consulting Research to independently triangulate our WRMP insights to inform the WRW regional plan.** In total, this triangulation included engagement with around 75,000 customers and 250 stakeholders across the WRW region, taken from 120 reports. The final report from this iterative process can be found on our website.

Given the importance of our WRMPs to this business plan and our LTDS, we have taken care to deliver a significant step-change in the scope and quality of our research and engagement. This has been central to ensuring that our plans are acceptable to customers in a period of unprecedented challenges, from the COVID-19 pandemic to the drought in 2022 and the ongoing cost of living crisis.

In our first wave of acceptability testing run by Turquoise Thinking in September 2022, informed acceptability of our draft WRMPs stood at 67% in our Cambridge region and 62% in our South Staffs region. The key reasons for finding our plans acceptable was that they focused on the right areas and that customers supported the options to overcome the challenges related to water resource planning. Those finding the plan unacceptable stood at 18% in both regions, with the main reasons relating to the scale of bill increases presented, with some saying that bills are already unaffordable and others saying that company profits are too high. It is important to note that our second wave of acceptability testing is due to complete by the end of October. This study will engage current and future customers with the context of what their AMP8 water bills will be to deliver WRMP and wider investments over that period, and the bill impacts up to 2050 for each of the options in our WRMPs. We will share the outputs of this study once it is completed.

### 4.4.4 Understanding the value customers place on different service improvements

We have used a wide variety of valuations and wider insight sources to test the level of stretch and ambition our customers have placed on a range of service attributes. These include valuations from our willingness to pay and Ofwat's ODI collaborative research. This has given us a thorough understanding of the service improvements customers want and are willing to pay for now and over the longer term.

Below, we summarise our journey to achieve best outcomes for ensuring our customer preferences are accurately and robustly represented in our Copperleaf portfolio optimisation tool, which has driven the investments in our asset management programme.

- After establishing our golden threads and customer priorities ranking (see section 4.1) in 2021, **we held a series of internal workshops to determine the attribute areas that were appropriate to include in our willingness to pay study to support cost-benefit analysis**. We evaluated the 20 priority areas identified in our customers' priorities tracker, where we needed to engage linked to Ofwat's common performance commitments for AMP8. We also considered the ambitions in 'Looking to the future'. We then shortlisted the service attribute areas where we could generate useable willingness to pay inputs to use in Copperleaf.

- Following a procurement process, we commissioned Qa Research and NERA Economics to **design, implement and analyse a stated preference survey to estimate customers' willingness to pay for improvements in these service areas**.

- Our brief was specific in that **the methodology approach chosen should overcome the challenges raised at both PR19 and PR24 when engaging customers with willingness to pay studies**. Specifically, that customers struggle to retain all the information about attributes presented at the

beginning of the survey and can find the pre-defined packages and the requirement to make multiple choices between pairs confusing. Qa Research's guidance suggested we could feasibly cover a maximum of 12 service attributes in the study, before issues arose that could compromise the quality of insights, such as cognitive burden for customers in terms of processing the volume of information shown in the survey.

- NERA's innovative approach addressed various concerns by asking customers to **make decisions about only one service attribute at a time and to provide information about that attribute at the point where the customer is asked to make the decision**, so customers are not required to retain information. Customers construct their preferred package by combining choices on individual attributes, rather than requiring them to choose between pre-defined packages. Each customer is only asked to construct one preferred package. We also ensured that throughout that the study adhered to the standards for high-quality research and customer engagement set out by Ofwat for PR24. Full details of the approach are found in chapter 2 of NERA's final report.

- Our willingness to pay covered several distinct stages to ensure confidence in the outputs.
  - **Stage 1** involved qualitative research, led by Qa Research, which was designed to ensure the wording for ten of the proposed attributes and associated service level metrics was written into the willingness to pay quantitative survey in a way that customers would be able to understand and provide a valid opinion. This was conducted through focus groups with household and non-household customers and in-depth interviews with vulnerable customers. Qa Research's report detailing the co-creative approach to designing the quantitative survey with customers can be found on our website.
  - **Stage 2** involved working with NERA to ensure the final valuation outputs from the survey could be mapped into useable inputs to reflect customer preferences in Copperleaf.
  - **Stage 3** involved working with Qa and NERA to deliver the quantitative survey and associated analysis and reporting. This covered a pilot stage to assess whether the approach was delivering usable outputs and if customers' were finding it easy to complete. This was then followed by robust fieldwork which, like the pilot stage, covered current and future customers both supply regions. The fieldwork approaches were extensive and featured an online survey for customers randomly selected from our household customer database with top ups through a commercial access panel provider and face to-face surveys with customers who were digitally disengaged and/or experiencing health or financial vulnerabilities (1,257 completed surveys). Future customers were reached through a commercial access panel provider (91), with non-household surveys carried predominantly through a commercial access panel provider (247).

- The NERA study showed there was **robust evidence of willingness to pay for improvements to support nature and wildlife across all models**. We also observed willingness to pay for improvements in three further attributes across most of the models NERA estimated – risk of a temporary 'do not drink' notice, water lost to leakage from pipes, and chance of property flooding from a burst pipe. These areas all align with the top ranked priorities in our customer promises tracker. The NERA report discusses the reasons why the other eight attributes did not attract significant willingness to pay values.

- Our willingness to pay study was also **peer reviewed by Dr Silvia Ferrin at the University of East Anglia, with reviews undertaken at the post-pilot analysis stage and on project completion**. The post-pilot review delivered several challenges, which led to additional analysis being carried out to improve confidence in the outputs. NERA's responses to these, agreed with us, are found in section 2.7.3 of its report. The peer review on the final report feedback can be found on our website, with the key recommendation being the need to triangulate the outputs of the study against other sources to improve confidence in the valuations to be used in Cooperleaf. In terms of wider assurance of the research approach, SIA Partners has reviewed our willingness to pay study against Ofwat's high-quality engagement standards, with it receiving top marks in all categories evaluated against. For more information see SSC14 'SIA assurance report'.

Ahead of the willingness to pay study taking place, we were working with our PR24 triangulation partners, Impact Research, which carried out the willingness to pay study at PR19. The aim of this work was to further develop our PR24 and technical triangulation framework to build on the best practice work undertaken by Accent and PJM Economics at PR19. Impact's phase 1 report (SSC08 'PR24 technical triangulation – phase 1 methodology') details the development of this framework and the academic peer review challenge given by Professor Iain Fraser at the University of Kent, including how the feedback was used to improve the approach. It was positive that this work was already under way as it responded to the challenge raised from the willingness to pay peer review around the need for a robust triangulation approach to reduce uncertainty around the valuations generated.

Impact's phase 2 report (SSC09 'PR24 technical triangulation – phase 2 results') details the process by which we have assessed our latest PR24 willingness to pay results from the NERA study and the willingness to accept values from the ODI research developed centrally on behalf of Ofwat. Additional data sources used in the approach, include:

- customer contact and satisfaction data;
- customer priorities insights;
- valuations from other studies conducted for our WRMPs and for PR24;

- valuations from other PR24 studies from other water companies also using the NERA methodology; and
- valuations from PR19 willingness to pay studies across the water sector, where mapping was possible.

Section 5 of the phase 2 report showcases the range of valuation sets generated. This allowed a wide range of sensitivity tests to be conducted in Copperleaf. These valuations were divided into a 'core' set of six, plus five additional 'sensitivity' tests, including a set based on the views of customers who are financially vulnerable. Chapter 5 of SSC37 'Our asset management approach to best-value investment planning through 2025 to 2030 and beyond' sets out more detail on how the valuation sets were sensitivity tested to assess the impact on the schemes selected by Copperleaf.

There were two key differences from the robust PR19 technical triangulation approach developed to ensure it was further enhanced.

First, the PR19 approach to assessing evidence began with defining two types of validity: 'theoretical' and 'statistical'. Theoretical validity covered the:

- robustness of the questioning method (for example, using established rating response scales);
- accuracy of how the service attributes were communicated with customers; and
- potential biases that may be present.

Statistical validity related to the specific features that affect statistical robustness, including:

- sample size;
- sample representativeness;
- statistical accuracy of models estimated from the data (model fit); and
- use of best practice techniques.

To make the approach more inclusive of non-numeric outputs, we added a third dimension of validity: 'depth'. This relates to the quality and detail of information given to survey participants and the level of discussion and education that contributed to their views. The intention was to encourage greater consideration of qualitative sources. These will not normally provide numeric values comparable to those provided by quantitative sources, but may give more confidence that issues have been covered in sufficient depth for customers and citizens to express an appreciably different opinion. We put forward this additional lens to evaluate data sources to produce a RAG weighting for each as vital to reflect the step-change we have made to our deliberative research to inform our AMP8 decisions.

Rather than having just one independent expert, supported by an academic peer review to evaluate the insight sources, we worked with Impact to convene and then run a Delphi panel. The Delphi method is a flexible tool for drawing together the opinions of several independent assessors, with the aim of moving towards a consensus, or at the very least a well-documented and clear basis for disagreement. It is often used to inform decision-making and forecasting, with the former being the more relevant to the application in this research and triangulation process. It is an established process used in numerous fields of study, by which a panel of people with relevant expertise (be it technical or commercial) are invited to take part in an iterative process run by a single organiser. Our panel comprised four independent experts from different fields, with each bringing a unique perspective. The method was applied through the following phases.

- **Phase 1 (December 2022).** After an initial development phase in which the questionnaire was extensively revised, the four participants were given a detailed summary of all available customer insights and research information on the 12 service areas being covered in our willingness to pay research. From this, they were asked to identify what they considered to be the rank order of customer priorities. They were also introduced to the results from the PR19 willingness to pay triangulation outputs in preparation for phase 2.

- **Phase 2 (February 2023).** The same four participants were given a detailed information pack with feedback on their comments from phase 1 and were asked to reconsider their rank ordering of customer priorities. They were also presented with summary reports of the willingness to pay/willingness to accept triangulated results for PR19, NERA's PR24 study and the ODI collaborative study. As well as giving their views on the credibility of these different information sources, they were asked to make one final reassessment of the rank ordering of customer priorities in the light of these results.

Impact's final Delphi panel report (SSC10 'PR24 technical triangulation – application of the Delphi method') details the key outputs, caveats and learnings from this approach. We are in the process of reviewing how we can improve the Delphi panel method in the future – feedback from some panellists suggests that involving a wider range of stakeholders would help further improve the quality of the outputs.

The feedback from the panel highlighted that the NERA and ODI valuation studies are perceived to be successful in the way they have presented the service attributes and asked respondents to express their priorities. The exercises in both studies are more intuitively appealing to respondents and easier to complete when compared to previous (DCE) approaches that characterised PR19. However, this departure from more established approaches used at PR14/PR19 and the attendant lack of a body of supporting technical knowledge raises a range of questions when it comes to interpreting the outcomes.

All this insight serves to support the importance of using triangulated valuations in the Copperleaf investment modelling process and rigorously testing the full range of variation in values that result from these very different studies. This includes running scenarios where the contribution of the new studies is down weighted, excluded altogether and/or used exclusively. This approach means we ended with a fuller

understanding of how the variation in inputs will ultimately affect the investment calculations in Copperleaf and allowed robust sensitivity testing to ensure we used the set of valuations which most accurately redefined our customers' preferences.

Our conclusion is that the triangulation approach and use of the Delphi panel has helped to reduce risk around uncertainty in the valuations. The final set of values used to represent customer preferences for service improvements in the Copperleaf model is set out in table 10 below.

**Table 10 Main valuation set used in Copperleaf**

| Combined water company results (Cambridge and South Staffs regions) – household and non-household | Central valuations used in Copperleaf |
|---|---|
| Water not safe to drink (per property affected) | £5,983 |
| Flooding from a burst pipe (per property affected) | £2,090 |
| Unexpected temporary loss of water supply (per property affected) | £4,573 |
| Water hardness (per property affected) | £404 |
| Taste and smell of water (per property affected) | £2,876 |
| Low water pressure (per property affected) | £1,612 |
| Lead pipes removal(per property affected) | £50 |
| Water metering (smart) (per customer) | £8 |
| Temporary use ban (1% change in risk) | £875,589 |
| Leakage reduction(1 Ml/d) | £140,076 |
| Protecting wildlife habitats (per hectare) | £24,285 |

## 4.4.5 Customer support for our affordability tariffs

As we saw the emergence of the impact of the cost-of-living increases starting to notably impact our customers' responses to our plans from early 2022, we started planning research to engage customers on how we could ensure our water bills remained affordable for all. In May 2023 following a procurement process, we appointed Qa Research to conduct a wide ranging study. This was designed to contribute to the following two key aspects of our high-level research journey for PR24 and ultimately inform the design of our plans relating to customer affordability support.

- Assessing the changes in the value customers place on service improvements – social tariff contribution level testing for our Assure tariff.
- Continuing to transform the customer experience – vulnerable customer deep dives into affordability.

This research really mattered, particularly as our South Staffs region contains communities with an above average levels of deprivation. We discuss this in more detail in SSC13 'Demographics report'.

The impact of the cost-of-living crisis has considerable potential to increase the number of customers who need financial support as their bills become more difficult to pay. This is evidenced by the analysis CEPA has carried out on the likely increases in water poverty. In addition, more customers might feel they have limited scope to pay more to contribute towards much needed long-term investments. These conflicting challenges are critical context to the core aim of this project, which is to assess customers' willingness to contribute a higher cross-subsidy level to support more customers through our Assure social tariff.

Alongside this, the project aimed to explore a range of different ways to make further improvements to our Assure scheme to make it more impactful and the funding stretch further. This included testing the concept of:

- shareholder match funding; and
- changes to the eligibility criteria, structure, promotion and communication of the Assure tariff.

Beyond the social challenges that exist, our regions also face environmental concerns focused on the need to conserve water for the future. This is relevant to future challenges around metering, which is why we also tested an affordability tariff for metered customers that we are planning to pilot in 2024/25. Our proposed new essential use tariff aims to also encourage water saving behaviour change as a way for eligible customers to save money on their water bills.

Given its importance, this study covered a wide range of customers and stakeholder segments, across both regions. All stages of the engagement were tailored to the audience to explore their views on Assure and the new essential use tariff, using approaches that best suited their preference for being engaged. We worked throughout the project with the Chair of the independent Stakeholder challenge Panel and CCW to

ensure the research was unbiased and met high-quality guidance standards for testing level of support for funding social tariffs.

The first stage involved in-depth qualitative research covering:

- six in-depth stakeholder interviews to explore their views;
- four online focus groups with household customers who would not qualify for Assure – specifically to gain feedback on attitudes to contributing more towards funding our social tariff; and
- two co-development workshops with customers on Assure, or eligible for the new essential use tariff – to co-develop improvements for Assure and discuss how to best make the new essential use trial a success.

The quantitative stage of the study involved a regionally representative and robust sample of customers (1,360 in total) to provide confidence in the outputs. This covered:

- ten cognitive testing interviews via Zoom to ensure the survey was clear and unbiased;
- an online survey with a random sample of customers (1,077 completed);
- an online survey via a commercial panel partner (130 completed);
- a vulnerable customer survey conducted face-to-face to reach customers who cannot or will not engage online (99 completed);
- a phone survey of our PSR customers (23 completed); and
- an online survey with our H2Online community members (31 completed).

We completed this study in early September 2023. We are currently reviewing the detailed actions we will take given the feedback to improve our Assure social tariff. We discuss our plans in more detail in section 3.3.1. The full findings and methodology approach is found in Qa Research's report. Below, we outline the key findings from this study.

- **The impact of the cost of living crisis is widespread, affecting the majority of households in some way.** However, some customers are facing these challenges more acutely due to their household situation – for example, families, lone parents or carers. More households with working adults say they are struggling with their finances because of rising bills and stagnant wages.

- **These financial challenges create various knock-on impacts for customers.** Beyond the stress and anxiety caused by money worries, there is the exhaustion and real health impacts of the constant trade-offs – for example, skipping meals, not putting the heating on, not showering, or washing clothes.

- **Water is currently one of the more affordable bills (87% say they always pay 'on time'), with energy bills, rent/mortgages and food prices causing the most stress.** But the clear message is that water bills still contribute to the rising package of household bills and customers do not want water bills to rise at the same rate as energy bills.

- **This insight is important as we need to ensure all our teams are aware that there will be customers struggling to pay their bills for the first time, while others will be struggling more than ever before because of their complex situations.** This also needs to be considered when developing and promoting our Assure social tariff.

- **In the household focus groups, we identified that customers support the principle of contributing through their bills to help others who are struggling to pay.** This is despite low awareness of the existence of cross-subsidy. Also, customers recognise and accept that increasing costs mean that existing contribution levels will note allow us to help the same number of customers through Assure as they do currently and that an increase is required as a result.

- **In the quantitative survey, we used the Gabor Granger method to assess the level of support for contributing to Assure.** We found that 61% of customers would support an annual contribution of £7.00 – this represents an increase of £2.00 a year from the current level of £5.00. The next level of contribution tested in the survey of £8.00 was acceptable to 58% of our customers, although there was notably higher level of support in our Cambridge region.

- **The household focus groups highlighted that customers do not want to see fewer customers supported through Assure, so are happy to pay £7.00 to ensure this does not happen** (survey respondents were told £7.00 was required to maintain the status quo). Evidence from the household focus groups suggests some customers would, in principle at least, be willing to pay more than £7.00, but their current financial circumstances can limit their ability to do so.

- **Based on the description in the survey, 48% of our customers said they would 'support' the introduction of an essential use tariff.** Of the remainder, however, only 20% indicated they did not support the tariff. Here, respondents were more inclined to indicate that they 'neither' support the tariff or its launch (32%) than reject it outright. There is majority support (56%) among target customers (that, is those with an annual income of between £19,050 and £25,000) and among metered target customers support increases to 64%. We are reviewing the findings and the barriers identified from customers to inform decisions around the structure and communication of the tariff in our trial in 2024/25.

Feedback on our Assure social tariff was broadly positive, with customers identifying the following improvements.

- Customers and stakeholders were **largely happy with the Assure scheme as it is**, although some questioned if the eligibility threshold (£19,050) was high enough, giving the cost-of-living crisis and the increase in 'working poor' households.

- Community gatekeepers were seen as **a particularly effective way of reaching the Assure target audience**. There is already a lot of good work here, which received positive feedback from customers and stakeholders.

- The journey onto Assure was generally **seen as positive and smooth, with very few changes**. The main request was a greater range of options to complete the application form and proof of income, especially mobile compatible methods.

- The idea of **a digital calculator was positively received** to help customers understand the best support package for their situation, but that this needs further development and testing before launch. We are committed to continuing our engagement to ensure a digital service is offered that will support as many customers as possible to obtain the support they deserve.

- Customers do not appear **to want much communication on Assure, but would rather only hear from us when there is a change to their tariff**. Any communications need to be tailored to their preferences, as customers pay attention to different channels.

## 4.4.6 Understanding customer support for financing the cost of debt

Water companies need to borrow money to fund their strategic capital investment programmes, which is subject to interest payments. Given we are a smaller water company, we borrow less frequently than larger ones and at a lower level. But this often means that the interest rate payable is typically higher. Ofwat assumes that a single interest rate is applicable for all monies borrowed by water companies, but recognises that smaller companies face higher costs of borrowing and so allow them to request a company-specific adjustment (CSA) to account for this.

Ofwat has set out guidance for PR24 on whether a water company is eligible to apply for a CSA. Companies must pass a two assessment gateway to be eligible. One of these focuses on the level of customer support for the adjustment. In late 202, we commissioned Impact to conduct "high-quality" research to support our CSA claim. The objectives of the study were to:

- deliver engagement that allows customers to express the perceived/actual benefits and disadvantages of being supplied by a small, local water company;
- understand customers' spontaneous responses to paying more through their clean water bill in the context of a CSA claim;
- measure customers' willingness to pay for a CSA premium;
- understand the main reasons that drive support or opposition towards us securing a CSA at different contribution levels; and
- explore in detail the response to an alternative to the CSA – that is, South Staffordshire Water being merged into a larger water and sewerage company.

To further build on the CSA study carried out at PR19, we went further to ensure a sufficiently large and representative sample of customers was engaged. We took a two-stage research approach, with both stages including household and non-household customers who pay water bills.

- **Qualitative phase.** A total of 43 customers attended the six online focus groups, supplemented by an additional 14 in-depth interviews, 10 with household customers in vulnerable circumstances and 4 medium/large business decision makers. All customers were recruited using a free-find method.

- **Quantitative phase.** This comprised a 15-minute survey with 1,314 household and 49 non-household customers. Everyone who took part needed to be either solely or jointly responsible for paying their water bill. These customers were recruited from a range of different sources: 827 (57% of the total sample) were randomly selected by demographic strata from our household customer data base database; 441 customers (30%) were from Prodege, Impact's online panel provider partner; 155 (11%) came from face-to-face, or recruit-to-online, methods; and the final 40 (3%) came from our H2Online customer communities. We used this mix of different sample sources to provide a robust base size that is representative of our Cambridge and South Staffs regions. It also allows for comparisons to be made, across different customer types, with varying levels of engagement with us. The face-to-face surveys were targeted at those respondents who are less able to complete online surveys and those who were under-represented in the online sample.

We had to make a number of key decisions when planning the research, some of which are discussed below. This demonstrates that we have provided customers with an accurate and fair view when giving considered feedback on their support for the CSA.

- When carrying out the research, **we informed customers about the proposed bill increase from 2025 to 2030**. This is so they could be presented with the bill impact of the CSA on top of their future water bills. At the time of the research, we took the maximum expected bill increase to ensure that we did not end up testing a bill profile that was lower than the final proposed AMP8 bills.

- In the quantitative survey, **respondents were asked what level of CSA increase they would find acceptable** using a stated-preference technique called Contingent Valuation Method (CVM). This is a method for obtaining willingness to pay values when a full-choice experiment approach is not feasible. Household customers were shown a starting bill increase of £1, £2 or £3, and non-household customers were shown an increase of either 1% or 2%. Both groups were asked if that amount was acceptable. These starting points were chosen as round numbers between the thresholds of potential CSA values that could be implemented. Respondents were then randomly assigned to a starting point, using a least fill method. This ensured

the numbers starting at each point was balanced across the total sample, which helped to remove potential bias.

- We engaged with the Chair of the independent Stakeholder Challenge Group during the study and CCW also reviewed the quantitative survey questions and stimulus materials ahead of cognitive testing with customers. The specific focus of their reviews was **on ensuring that we had accurately portrayed what a CSA is and the impact that it will have on customers' bills**. Several changes and improvements were made to the survey design as a result of this independent input to ensure a high-quality survey design.

Impact's full report covering the methodology, sampling, weighting, analysis and reporting is available on our website. The key findings from the study are summarised below.

- **Customers were generally aware of our brand**, but for most their level of knowledge was low.
- In the qualitative groups, **many of the felt we are 'quiet' or 'hidden' as a brand, and as such did not have much to say other than that we were reliable and seemed to do a good job**. Customers were largely happy with the service they received from us, although some groups did show customers with some service issues. This caused value of money for satisfaction scores to be lower.
- In the quantitative survey, **just under half of customers survey reported they found it 'very' or 'fairly easy' to pay their current clean water bill and 61% felt they got good value from their bill**.
- Customers had **varied opinions on the size of our company compared with the water and sewerage companies**. Many considered our small size to be a good thing, as the perception of smaller companies is that they better knowledge of the local area and employ local people.
- Customers were **largely impressed with how we are performing**, and were pleased to see that their average household clean water bills were below the national average.
- When shown that bills are likely to increase by around 25% during AMP8, **most customers were understanding and accepting of the level of increase**.
- In the quantitative survey, customers were also asked how easy it would be to pay their future clean water bills. With the above increase in mind, **29% felt it would be either 'very' or 'fairly easy'**. These figures show a reduction from earlier in the survey when customers were asked about affordability of their current bill, where positive agreement stood at 47%.
- In the qualitative phase, when they were asked spontaneously **household customers suggested a figure of £4 to £5 a month would be acceptable for a CSA**. When a maximum increase of £4.50 a year was shown to these customers, a majority were accepting of the amount.
- For non-household customers, the figures suggested were around 5%. So again, **the maximum shown of 2.5% was largely acceptable**.
- But some customers in the qualitative groups **disagreed with the CSA on principle**, and considered no increase would be acceptable – even as little as 50p a year – suggesting it was unfair asking customers to pay it.
- In the quantitative survey, **household customers found a CSA of £2.50 a year was found to be acceptable**, using a CVM and Turnbull analysis. The **percentage figure for non-household customers was 1.56%**.
- When asked if they would prefer to pay the CSA and remain being supplied by us, **most customers suggested they would be happy to pay it, rather than be supplied by a larger company instead**. They suggested their bills may be higher if they were supplied by a larger company and they may receive an inferior service if supplied by another water company.

Our robust and representative research provides strong evidence that, overall, our customers support our CSA claim. But the insights highlight the importance of our comprehensive affordability strategy to ensure water bills remain affordable for all given the pressure customers' finances are likely to be under over the coming months and years.

## 4.4.7 Understanding our customers' preferences for delivering long-term investments

We have engaged widely through a range of robust research studies to understand customers' preferences for the long-term investments they want us to make to improve their water service up to 2050 and when they want these to be made to unlock the benefits they will bring. We detail our approach to this in our LTDS, including the decision making framework we have developed with our triangulation partners, Impact Research, to ensure our customers preferences sit at the heart of the ambition and strategy of our long-term plans.

Alongside our LTDS core study, we have engaged with customers using deliberative techniques in two studies to understand their preferences. Further detail about our approach can be found in section 1.4 of SSC07 'Customer engagement strategy and key insights'.

- Our **WRAP forum, which was the backbone of our wider customer research programme to inform the policy decisions for our WRMPs**. Our research partners, Community Research, facilitated this over four touch points, using a combination of online discussion groups and the Recollective platform to run one- and two-week forums to engage current and future customers with a

wide variety of educational water resource related topics and questions.

- Our **first use of a Citizens' Jury to challenge our strategy for achieving net zero carbon emissions**. We worked collaboratively with our research partners, Explain Research, to deliver a series of engaging online sessions over a four week period with two all-day face-to-face workshops following this to enable customers who would or could not join an online Jury to participate. We have used the insights from this to inform the decisions we have made for our PR24 and LTDS plans around carbon emissions.

We have found strong level of support for the ten long-term ambition targets tested in our LTDS research. Specifically, levels of support for the five ambitions and targets tested in the quantitative study run were above 90% agreement. This was true across all customer and future customer segments engaged (see page 141 of Turquoise Thinking's independent report). The support for these ambitions is evidence of the performance commitments level put forward in our plan for AMP8, which form the first stepping stone to delivering the ambitions customers want us to achieve in the long term.

## 4.4.8 Understanding how customers' and stakeholders' preferences can differ

By targeting our research programme to be inclusive of a diverse range of customers and stakeholders and though the use of varied research techniques – including online communities, deliberative workshops, and co-creation and co-development with customers – we have explored in more depth both the role we play in customers' lives and discussed the strategic challenges for the future of their water service. This research has provided a considerable depth of insight on our customers, and in particular the areas and service they are interested of hearing more about.

By using this insight to inform our plans, we have continued to develop new ways of understanding our customers' differing needs and expectations for the services we offer. As part of our thematic review triangulation we have worked with our PR24 triangulation partner, Impact, to better understand the differences between the people and organisations we serve to provide us with a fuller picture of where we need to take these into account. SSC12 'PR24 stakeholder and customer segment analysis' summarises the key differences found between:

- customers in our Cambridge and South staffs regions;
- customers and stakeholders;
- household and non-household customers;
- current and future customers; and
- customers in vulnerable situations and those not in vulnerable situations.

We have also worked with Impact to draw out the demographic differences between our regions and where our customer base differs from other water companies in England. This centralised resource based on open data sources and BAU insights provides an up-to-date review of our household and business customer demographics and is a stepping stone for further enhancing it to help our teams make best decisions when delivering our AMP8 plans. See SSC13 'Demographics report' for more detail.

We have set out the notable differences, including:

- levels of deprivation and household income;
- digital deprivation;
- housing tenure; and
- age of population.

For example, the analysis shows that digital deprivation in our Cambridge region is in line with the national average. But there are variations within our South Staffs region: while the latest results in the Dudley area is in line with the rest of England (showing a marked improvement between 2017 and-2020), the Sandwell area has notably higher levels of digital deprivation that are twice as high as the national average. We are planning to use these insights to better target our support and services to meet the needs of the local communities we serve.

We have continued to track changes in the attitudinal segmentation we developed in 2018 with Accent, which we have used to analyse research findings to provide greater insights. This approach allows us to continue to assess where support for our plans differs. We still find one segment of customers find our plans more unacceptable. This segment admits to not thinking much about their water use or water services and prefers a more transactional relationship with us. Our analysis, when we last refreshed the segments in 2021, highlights that we have seen this segment shrink in size from 27% in 2018 to 18% as a proportion of our overall household customer base. The segment that is most highly engaged with their water use and the wider community their live in, has grown from 24% to 35% over the same period (see chapter 14 of SSC13 'Demographics report').

We will look to refresh the segments again in 2024 to understand if this trend has continued. However, it is positive that a greater proportion of our household customers are becoming more open to a having a connected relationship with us, evidencing our need to deliver against their expectations by going further to offer a more proactive and tailored service.

In SSC07 'Customer engagement strategy and key insights', we summarise what our customers told us about their preferences in relation to the areas they say are priorities for us to invest in. We also look back to PR19 to highlight the changes we have seen, which we have used to inform the decisions in this business plan.

## 4.4.9 Developing our approach for AMP8 and beyond

Following the submission of this business plan, we are fully committed to continuing our ongoing focus on engagement and research. We will turn our attention to how we continue to

improve and adapt to the challenges we face and the best way to engage with our customers as new opportunities emerge, such as use of AI. We are committed to the areas described in table 11 below and will continue to consider approaches that are proportionate to our size as one of the smaller water companies in the water sector.

**Table 11 Our approach to customer engagement for AMP8 and beyond**

| Approach | What we will do |
|---|---|
| Enhancing our BAU research and insight programme | We will continue to **enhance our BAU customer research and insight programme**, placing a particular focus on our household segmentation model. In particular, we will:<br>• seek to better understand the ways customers prefer to interact with us and how often, to improve the effectiveness of our communications and encourage them to engage with the services and support we offer;<br>• explore more effective segmentation to help us deliver further improvements in how we meet the needs of customers in vulnerable circumstances; and<br>• develop an engagement programme to help restore the trust that has been lost with increasing numbers of customers. |
| Embedding ongoing deliberative engagement within our business | We will investigate the **best ways to embed our use of ongoing, deliberative engagement approaches**, given the success of these at PR24. This includes how we:<br>• engage with our H2Online communities to help us deliver our AMP8 plans;<br>• take our WRMP WRAP forum forward to challenge us on how well we are delivering our plans;<br>• continue with our Citizens' Jury to challenge our strategic decisions and to hold us to account with progress against the targets we have set to reduce our carbon emissions;<br>• continue to evolve the 'Your water, your say' sessions to allow effective challenge of the delivery of our AMP8 plans; and<br>• evolve our Young Innovators' Panel to further bring the voice and ideas of future customers into our decision-making processes across the business. |
| Evaluating our learnings | We will evaluate the **learnings from how we and the wider water sector engaged during PR24 to inform how we shift our strategic approach to engagement into PR29**. We look forward to engaging with Ofwat and CCW and the water sector in general on key research areas, including:<br>• valuations research;<br>• insight triangulation;<br>• intergenerational fairness;<br>• LTDS; and<br>• AAT research. |
| Embedding other insights into our engagement programme | We will explore the best ways of **embedding behavioural, demographic and ethnographic insights into our programme of activities when we launch new initiatives**. This will help us to understand how we can refine them over time to deliver the best outcomes for customers, communities and the environment. For example, we need to get closer to our customers' real-time experiences, given the changes many of them will experience when we start rolling out our universal metering programme and when we launch our essential use tariff trial in 2024/25. |
| Developing our insight triangulation approach | We will **develop our insight triangulation approach** to truly make this part of our BAU decision-making now that the work to triangulate all our PR24 insights is complete and a best practice framework is in place. |

## 4.5 Engaging with our stakeholders

**Understanding the views of our wider stakeholder base alongside those of our customers is also an important part of this business planning process. The key thing for us is to ensure we always engage with the right stakeholders in the right way and at the right time. This is because who we engage with and how we carry out that engagement can change depending on our particular circumstances – and those of the wider water sector – at any given time.**

### 4.5.1 Key components of good stakeholder engagement

We follow best practice when engaging our stakeholders. This includes using the following components to build an approach that is tailored to stakeholders' specific needs and that is proportionate to our size and level of resource.

- Stakeholder identification and analysis. Identifying and prioritising stakeholders, and assessing their interests and concerns.

- Information disclosure. Communicating meaningful and accessible information to stakeholders early in the

decision-making process, and continuing this communication regularly.

- Stakeholder consultation. Planning each consultation process, documenting the process and communicating the follow up.
- Negotiation and partnerships. Entering into 'good faith' negotiations and forming strategic partnerships, particularly for difficult or complex projects and programmes.
- Grievance management. Establishing accessible and responsive means for stakeholders to raise concerns, and demonstrating how those concerns have been addressed.
- Stakeholder involvement in project monitoring. Involving directly affected stakeholders in monitoring project impacts.
- Reporting to stakeholders. Having the mechanisms in place to enable reporting back to stakeholders and others with more general interests in our business.
- Management functions. Building and maintaining sufficient capacity within our business to manage stakeholder engagement processes, track commitments and report on progress.

## 4.5.2 Principles of stakeholder engagement

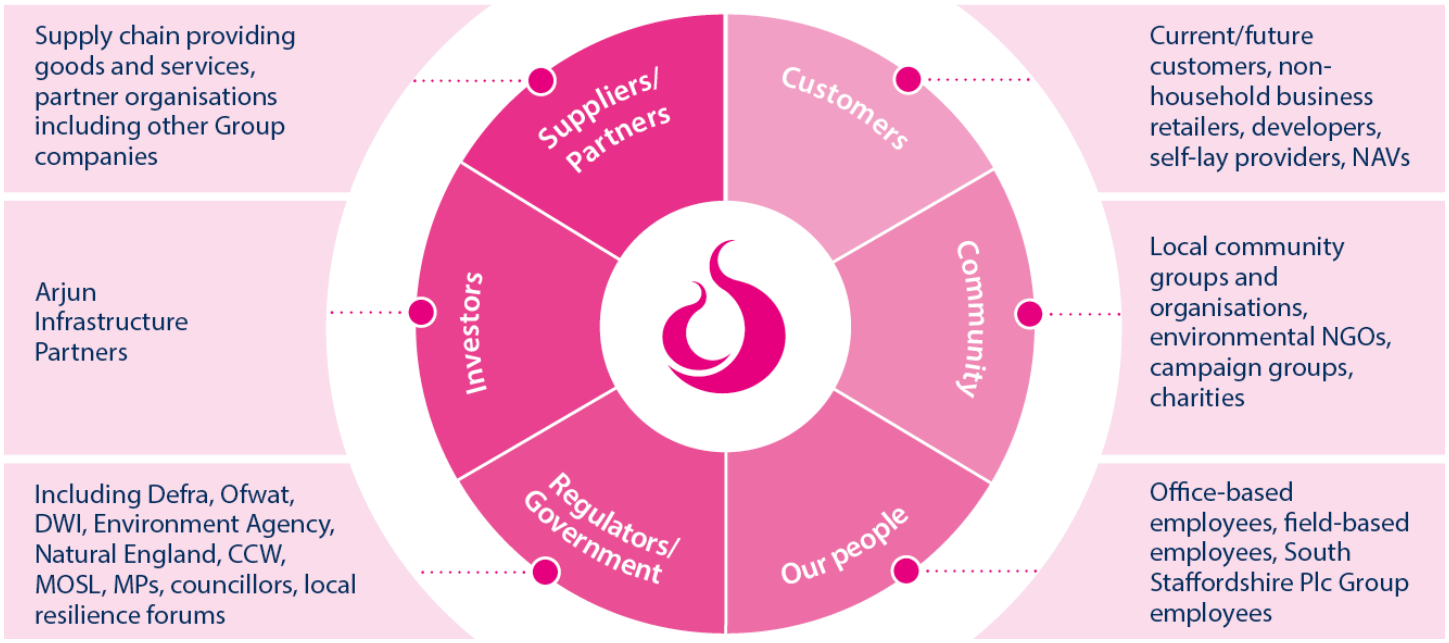
We also take account of the following principles when engaging with our stakeholders.

- We understand who our stakeholders are. We have gathered information about them, learned about their needs and the things that are important to them. This ensures our engagement is always targeted and meaningful.
- We consult early and often. This helps stakeholders to understand our business, our aims and objectives. It also enables us to engage in a robust and proportionate way.
- We stay people focused. Key to this is understanding that all stakeholders come with personal feelings and agendas that may affect their behaviour. We recognise the importance of always considering a range of opinions and outlooks.
- We plan ahead. This means taking time to plan engagement activities carefully, ensuring openness and transparency at all times.
- We anticipate hazards and risks. We take simple and timely actions designed to keep the engagement on track and minimise risk. Collaboration with stakeholders is key to this.
- We find compromises. This helps us manage stakeholders with differing expectations. It also enables us to prioritise as necessary, recognising that these priorities may change over time, and that adaptability and flexibility will drive positive results.
- We define success. This helps stakeholders understand what a successful outcome looks like, using customer-friendly approaches and language.
- We accept responsibility. This means being clear about who is responsible for what throughout the engagement and making sure ethical approaches are always followed.

## 4.5.3 Our key stakeholder groups

Every day, people across our business engage with a wide variety of stakeholders, developing relationships and gaining insight from within and outside the water sector. This has enabled us to develop a clear understanding of their needs. In addition, as outlined in the sections above, we have actively engaged with different stakeholder groups as we have developed our plans for AMP8 and beyond.

Our main stakeholder groups are set out below.




In table 12 below, we list some of our key stakeholders, how we have engaged with them and how this engagement has informed our plans for AMP8 and beyond.

**Table 12 How engagement with key stakeholders has informed our AMP8 decision-making**

| Stakeholder | Engagement theme | How we have engaged | How the engagement has informed our plans |
|---|---|---|---|
| Ofwat | PR24 price review process | Routine meetings to discuss plans, workshops to learn more about regulatory expectations and discussions on local/specific challenges.<br>Regulatory submissions. | We have followed Ofwat's methodology and other guidance for our business plan and long-term delivery ambitions. We have paid particular attention to the requirements of the quality and ambition gateways and the regulator's expectations for water companies' business plans. |
| Environment Agency | Drought resilience<br>Environmental protection and enhancement | Regular meetings and feedback sessions, with particular reference to our Cambridge and South Staffs draft WRMPs, WINEP and the business planning process for PR24. | Our engagement with the Environment Agency and other environmental interest groups have informed our WRMPs and our AMP8 WINEP obligations. It has also framed our long-term environmental destination approach. |
| Drinking Water Inspectorate | Water quality<br>Reliable water supplies | Regular meetings about all aspects of our water quality, including through water sector forums and in response to actionable incidents/events. | This engagement has informed the water quality schemes in our AMP8 investment programme. It has also informed our long-term ambitions – e.g. around lead removal and other parameters. |
| Defra | Drought resilience<br>Environmental protection and enhancement | Engagement is primarily through stakeholder forums and working-level meetings in relation to the delivery of UK Government environmental plans and policies – e.g. water efficiency labelling on white goods. | The engagement has informed our plans around our AMP8 WINEP obligations, our long-term environmental destination and for the Fens reservoir strategic resource option in our Cambridge region (with Anglian Water). |
| CCW | Customer voice<br>Acceptability and affordability | Regular update meetings, PR24 methodology workshops and consultation responses. | We have followed CCW's guidance on customer engagement. We have also aligned our affordability strategy with CCW's independent review and its review of developing a customer-centric approach, among other things. |

| Stakeholder | Engagement theme | How we have engaged | How the engagement has informed our plans |
|---|---|---|---|
| Local authorities | Water quality<br>Reliable water supplies<br>Acceptability and affordability | Engagement is primarily at a working level to share information – e.g. notice about planned works.<br>High-level discussions about strategic resource options.<br>Collaboration in the event of major incidents. | We have held a number of strategic meetings (with Anglian Water) with local authorities in our Cambridge region about the development of the Fens reservoir. The first public consultation phase on the reservoir closed in December 2022. Local authority development plans have also informed our demand management approach, including our universal metering strategy. |
| Local environmental groups and organisations | Drought resilience<br>Reliable water supplies<br>Environmental protection and enhancement | Stakeholder roundtables as part of the WRMP development programme – particularly in relation to water transfers in our Cambridge region (Grafham).<br>Engagement with stakeholders on environmental protection, particularly in our Cambridge region. | Some stakeholders considered water transfers to be an essential component in our Cambridge WRMP – saying that they would help to meet the deficit over the medium term. We have taken these views on board and have also developed range of demand-side measures, which stakeholders also considered essential.<br>We have also used insight from environmental groups to develop a ten-year programme of river restoration measures for seven chalk streams in our Cambridge region. |
| Local community groups and charities | Supporting customers and communities<br>Acceptability and affordability | Routine engagement with partner organisations through our community hub, education outreach programme and mobile community team.<br>Roundtable discussions to identify key areas of focus in our Cambridge and South Staffs draft WRMPs. | We have used insight from local community groups to shape our retail plan, with particular reference to our affordability and vulnerability strategies and our essential use tariff trial. Insight from our local communities has also helped to shape our diversity-led water efficiency project, which was awarded £270,000 from Ofwat's Innovation Fund in 2023. |
| Supply chain partners | Reliable water supplies<br>Value for money | Regular engagement to ensure the delivery of our day-today operations and help us support new and efficient ways of working. | We have used insight from our supply chain partners to implement changes to our procurement processes for AMP8. This includes, among other things: carrying out assurance on the financial stability and capabilities of our delivery partners; carrying out performance monitoring to ensure stronger relationships; ensuring early engagement in complex projects; implementing a new contract management system; and moving to a 'procure early to secure' approach. |
| The Board | Strategic direction | Engagement is primarily through monthly Board meetings and the PR24 Board sub-committee. | The Board's decisions have shaped our PR24 business plan submission and LTDS, including but not limited to submissions to RAPID in relation to the Fens reservoir, approval of our PR24 totex plan, and approval our bid for the Defra accelerated spend process. |
| Our people | Delivering the best plan for the business | LTDS workshops to set our ambitions to 2050.<br>'Lunch and learn' sessions across our key sites in our Cambridge and South Staffs regions. | Our people have helped to shape our long-term ambitions, challenging us where they through we were not going far enough. They have also input into our AMP8 retail and wholesale plans, with particular reference to resource levels, operations, water production and deliverability. |

## 4.5.4 The independent Stakeholder Challenge Panel

In April 2022 we set up an independent Stakeholder Challenge Panel. We appointed an independent Chair and together co-created an external challenge process which would embed the best of our previous PR19 Customer Challenge Group, but which would operate at a more strategic levels, given the challenges to be addressed at PR24. The independent Chair was supported by an impartial board of stakeholders and experts from across our Cambridge and South Staffs regions, with interest, passion and expertise across all ESG (environmental, social and governance) disciplines.

The role of the Stakeholder Challenge Panel was to:

- provide us with challenge on the quality, range and breadth of out qualitative and quantitative engagement with customers and stakeholders;
- hold us to account for the promises we have made to customers and stakeholders about the services we will deliver;
- challenge us on how effectively the feedback has been used to shape our long-term plans, policies and objectives; and
- ensure our future plans deliver the best outcomes for customers, communities and the environment, now and in the future.

Alongside this, the Panel Chair also engaged with CCW's Central Oversight Group to identify potential areas of additional focus, while also playing an essential role in helping us to communicate our future plans with customers and stakeholders. This provided a structured forum for two-way dialogue and engagement.

## 4.5.5 Developing our approach for AMP8 and beyond

We recognise that our people are having conversations with our varied stakeholder every day. Making sure we use the feedback from these conversations with stakeholders to drive our decision-making is critically important for us. So, we will implement a process to capture this insight more effectively, using the monthly reporting already in place to minimise the administrative burden on our people. We will then use this insight to help drive our decision-making at a strategic level, highlighting our key stakeholder conversations each year in our annual report and financial statements. We consider that this approach is proportionate to our size as one of the smaller water companies in the water sector.

### Securing your water future – using open data to resolve future water challenges

As a business that always plans for the future, we recognise how open data can transform the approach we take to tackling the long-term challenges we face – in particular, the impact of climate change on water resources, increasing customer expectations to deliver better services, and protecting and enhancing the natural environment. We also recognise that as well as building resilience with our water supplies and assets, we also have to build resilience in our data and management, to enable us to address these long-term challenges.

So in August 2023, we engaged with our people from across our Cambridge and South Staffs regions and with other stakeholders at an open data sprint on the theme of 'Future proofing Cambridge: how to solve a future water challenge'. The aim was to understand patterns in our current water use data. We wanted to develop innovative and novel approaches to assessing the potential insights. Having shared our consumption data with attendees, we divided them into groups and tasked them with finding out where water usage is highest and to suggest ideas for reducing this use.

At the end of the sessions, each team presented their findings. Because we had a mix of people with different areas of expertise within each team, we gathered a wide range of insights on potential demand reduction initiatives, including:

- weather-based communications initiatives and campaigns;
- tailored interventions for affluent communities, with approaches designed based on house or garden size;
- more environmental leverage in affluent communities; and
- targeted water efficiency strategies without restrictions on water use for those who may struggle to pay their water bills.

We will build these open data insights into our BAU activities as part of our long-term strategy to build holistic resilience across our capabilities. At the time of writing, we are planning our next open data sprint event, where we hope to engage with a wider range of stakeholders both from within and outside our business on the challenges we face around reducing demand in a sustainable way.

Our approach to open data was called out in Ofwat's most recent water company performance report, published in September 2023.

# 5. Testing the acceptability and affordability of our plans

## An important step in our PR24 customer engagement journey has involved conducting robust research into whether our customers find the investment in our AMP8 plans acceptable and affordable. This is known as AAT research.

We have carried out wide-ranging AAT research and wider engagement to ensure we can have confidence:

- that our plans are acceptable to the majority of our customers and, for specific customer segments that do not agree they are acceptable, what we need to change or communicate better in our plans to make them acceptable and build trust that we can deliver them; and
- to evaluate the affordability challenges that customers may have with paying the levels of water bills needed to deliver our plans and, if identified among any customer segments, how best to support these through our affordability strategy as set out in section 3.3.1 on page 48.

The main evidence we present in this chapter is taken from the AAT research carried out following Ofwat and CCW's detailed guidance. We undertook the qualitative stage of our AAT research in the first two weeks of June 2023, with the quantitative stage running from August to mid-September. We followed the guidance through the qualitative and quantitative stages of the research.

Where we decided to deviate from the guidance in a few places in the quantitative stage, we have provided robust evidence from the customer research conducted during the study. This includes cognitive testing with customers and engagement with the independent Stakeholder Challenge Panel to agree changes that we strongly considered would ensure we delivered robust research outputs that can be relied on and a positive survey experience for customers. We do not view any of these deviations as material to the outcomes of the study and we will feedback to Ofwat and CCW through the official channel on potential changes to consider for the guidance for water only companies when carrying out further AAT research.

## 5.1 'Your water, your say'

**At the same time as our qualitative AAT research was taking place, we also held our first 'Your water, your say' session on 14 June, following Ofwat and CCW's guidance. Customers and stakeholders from across our Cambridge and South Staffs regions attended this session, alongside the Chair of the independent Stakeholder Challenge Panel and other attendees from the regulatory bodies. We outline the approach we took to this session below.**

- Five weeks before the event, we launched a wide-ranging recruitment drive to encourage customers and stakeholders to register for the session. This included using social media, customer emails and website promotions. We also used posters and flyers, and promoted the session at community group meetings with stakeholders to encourage people to attend in person at the specific locations we had booked (one each in our Cambridge and South Staffs regions).

- By 14 June we had received just under 70 registrations from customers and stakeholders who used the form on our website to apply. Those who registered answered a question about which of our supply regions they were most interested in. Of those who completed the registration questionnaire, 15 expressed an interest in our Cambridge region with 5 expressing an interest in our South Staffs region; 7 had an interest in both regions; 14 represented stakeholder groups; 12 said they were household customers; and 1 described themselves as a business customer. While not fully representative of our Cambridge and South Staffs regions, the session gave us a diverse set of attendees.

- We shared pre-read material for customers and stakeholders who had registered ahead of the session. This outlined some information about our business and the challenges we are facing now and over the long term. The independent Stakeholder Challenge Panel, Ofwat and CCW reviewed this material to ensure it was clear and jargon-free. We also engaged with the independent Chair of the 'Your water, your say' session, and with Ofwat and CCW, to share the full presentation for the session and a separate briefing about our business.

- We hosted the session online. It ran from 4.00 pm to 6.00 pm and followed the format laid down in the guidance. Andy Willicott, our Managing Director, began by making a 15-minute presentation about the company, which included a short film, and discussed the proposed investments in our AMP8 business plan and the bill change associate with delivering these investments. A question and answer session followed our presentation, with questions from attendees directed by the Independent Chair to members of the Panel, which comprised senior leaders from across the business. In line with the guidance, the questions focused on: long-term outcomes and how our AMP8 business plan delivers the first part of our long-term

delivery strategy; environmental outcomes; customer service priorities; and bill affordability.

- Following the session, we published a transcript of the questions asked and our responses to them. This included our responses to the questions raised in the chat feature during the session, but which were not answered because of time constraints on the day. We also shared the outputs of this session with all those who registered to attend.

We are fully committed to continuing the 'Your water, your say' sessions as part of our wider engagement approach. Our follow-up session will be held on 7 November 2023. We recognise that these types of open challenge forums will never be truly representative of our customer and stakeholder voices. But we see the value of including them as part of our ongoing engagement programme to ensure effective challenge of the delivery of our AMP8 plans and to inform the development of our plans for AMP9.

We are reviewing the learnings from the first sessions and are supportive of Ofwat's and CCW's changes to improve the guidance – in particular, to ensure the challenges raised focus on our AMP8 plans and the associated bill impacts. We are also looking to refine our own approach to ensure we achieve the following.

- A more balanced attendance across our Cambridge and South Staffs regions – a key theme from our first session was that the customers and stakeholders who attended from our Cambridge region focused most of their questions on our plans to tackle environmental concerns, from abstraction rates to strategies to reduce water use. The robust challenge was welcome and highlighted the priority areas that we have seen throughout our engagement over the past three years. But feedback from our South Staffs customers and stakeholders was limited in comparison and we want to ensure this is rectified in the next session.

- We will also review how we can better encourage customers who cannot attend an online session to participate.

## 5.2 Ensuring the robustness of our AAT research

**Below, we outline the additional steps we have taken to provide further confidence that our AAT research is robust.**

First, given that we supply two socially and geographically diverse regions, with different challenges and demographics, we wanted to ensure we engaged with enough customers in each region to have confidence in the research at a regional level. This meant we went beyond the minimum sample sizes outlined in the guidance, particularly with the quantitative stage where we engaged 1,104 (987 household and 117 non-household) customers. The research was carried out independently by one of our research partners, Accent Research, and the qualitative and quantitative reports from this testing are available on our website. Whenever we showed the AMP8 bill impacts to customers, we used '£' changes for household customers and '%' changes for non-household customers.

As well as engaging with a representative sample of household and non-household customers in the main AAT research, we also engaged the following audiences. Accent has incorporated the insights from these two studies into its report as a separate analysis. This has allowed us to assess any differences; it also adds to the range of evidence from customers and stakeholders about our plans, in addition to the main AAT study.

- We engaged the 25 members of the South Staffs Young Innovators' Panel through qualitative discussions moderated by Blue Marble, our research partner. The session on our business plan used similar versions of the stimulus materials used to engage future customers (18- to 25-year-olds) in the qualitative stage, but with some minor modifications to ensure relevance and comprehension for an audience that is often even further removed from their water services and with less life experience. These discussions took place in July 2023.

- We engaged with our H2Online household customer communities in our Cambridge and South Staffs regions, with 54 participating through a quantitative questionnaire in late August/early September 2023. We made only one change from the main AA questionnaire used in the main quantitative testing – asking members to provide their latest water and sewerage and water only bill amounts. Given the privacy policies in place to protect community members, this was the only option available to us given the small window for research fieldwork.

Second, given the importance of our draft WRMPs to the delivery of our plans to 2030 and then out to 2050, we also carried out qualitative and two waves of quantitative AAT research to ensure the plans deliver what our customers expect. We summarise the scope of the engagement programme below.

- During July 2022 we engaged our WRAP panels in both regions, in sessions facilitated by Community Research. We had previously taken WRAP members on a journey in 2021, with three sets of deliberative engagement sessions to help inform the development of our draft WRMPs. This included reviewing a wide-ranging of supply and demand options, along with decisions around our environmental ambitions and the fairness in paying for investments. This made WRAP members more informed and allowed them to provide further valuable feedback. In this final stage, 13 WRAP members in our Cambridge region and 13 in our South Staffs region took part.

- In the final forum, WRAP members reviewed our draft WRMPs and the associated bill impacts to 2050. They were asked to assess the options put forward to protect the environment and improve the resilience of the water supply. They were also asked to evaluate if they found our

plans acceptable. Given that we did not know the final bill impacts for our AMP8 plans, we decided to show them the bill impacts for 2025 to 2050 as they related to delivering our WRMPs. The research report is available on our website. We used outputs from the qualitative study to inform the design of a robust quantitative study among a regionally representative sample of 598 household customers, 42future customers and 78 non-household customers. Turquoise, one of our independent research partners, carried out this study.

- We had **planned to use a mixed methodology, covering online surveys targeting a random selection of customers from our household database, online panels to reach household and non-household customers and on-street interviews**. Unfortunately, on the eve of the fieldwork, which was due to take place on-street in selected locations in our Cambridge and South Staffs, the death of Queen Elizabeth II was announced. We made the decision to cancel the fieldwork because of the sensitivity of approaching people at the time. At that point, the achieved sample already included a high proportion of vulnerable customers and we decided that digitally disadvantaged customers would be able to give their feedback during the second wave of the research. At this stage, Ofwat and CCW had not yet published the AAT guidance, so we worked to CCW's guidance from PR19, including using cognitive testing of the questionnaire design and stimulus materials used. This helped to ensure they survey was easy to understand and meaningful to customers. As there was no notable difference between our least cost and proposed business plan, we only tested our proposed plans with customers. The research report [add hyperlink] is available on our website.

- Following this study, **we also engaged with household bill payers from our H2Online communities**. They completed a slightly shorter survey, although all the key questions, stimulus materials around the options and the way the bill impacts were shown remained the same. Overall, 138 members from our Cambridge and South Staffs H2Online communities took part. Having been engaged on numerous activities related to our draft WRMPs during 2021/22, this gave our more informed members the chance to see our proposed plans and feed back on them.

We used the outputs of these wave 1 qualitative and quantitative studies to inform decisions when progressing the development of our draft WRMPs, alongside the feedback received from the public consultations on our draft plans.

In summer 2022 we considered how best to approach the quantitative AAT research given that we did not yet have full clarity on our expected bills for AMP8. Also, the options in our draft WRMPs were still moving to meet changes to regulatory requirements. So, we committed to carrying out a second wave of quantitative testing ahead of publishing the final WRMPs for our Cambridge and South Staffs regions in autumn 2023.

At the time of writing, we are working once more with Turquoise on the second wave of our WRMP AAT study and will publish the final results of our WRMP AAT when we publish our final WRMPs. The second wave covers both household customers (including future customers) and non-household customers. Given our WRMPs are 25-year plans, we did not follow Ofwat and CCW's AAT guidance in full. But we did draw on specific questions and best practice to ensure consistency, where possible. The key points of difference are as follows.

- Ahead of customers seeing the 25-year bill impacts for our WRMPs, **we shared with them the typical AMP8 bill over the period 2025 to 2030, including inflation and a reference to how much of the investment was going into our WRMPs and our wider PR24 plans**. We then presented the average 25-year bill impacts for delivering our WRMPs, using and easy-to-follow matrix to list each option. We had cognitively tested this for comprehension with customers in wave 1. This allowed participants to see the breakdown of where investment spend was going into each supply and demand options, such as universal metering or a new reservoir.

- We **deployed our typical PR24 fieldwork approach of using mixed methodologies to ensure we reached the widest possible range of customer voices**, including those who are digitally disadvantaged. Towards the start of the survey, we asked customers to tell us about their latest annual combined water and sewerage bill. This is because when surveying customers online or in a particular location, we are unable to use data from our billing system. But this approach still allows us to present customers with their annual clean water bill figure, which was then used as the context for asking about the acceptability and affordability of our plans later in the survey.

- As our WRMPs cover a different set of service areas than our AMP8 plans, we selected the investments that are most material for the WRMPs. We **followed the guidance in terms of showing customers the most important aspects of our proposed plans and the ones that will have a material impact on their water bills in the future**.

In the rest of this chapter, we outline the key findings from our main PR24 AAT research and how we have used the insights to make changes to our plans. We have carefully triangulated the findings against what we have learned from the feedback gained from the remainder of our research and engagement journey.

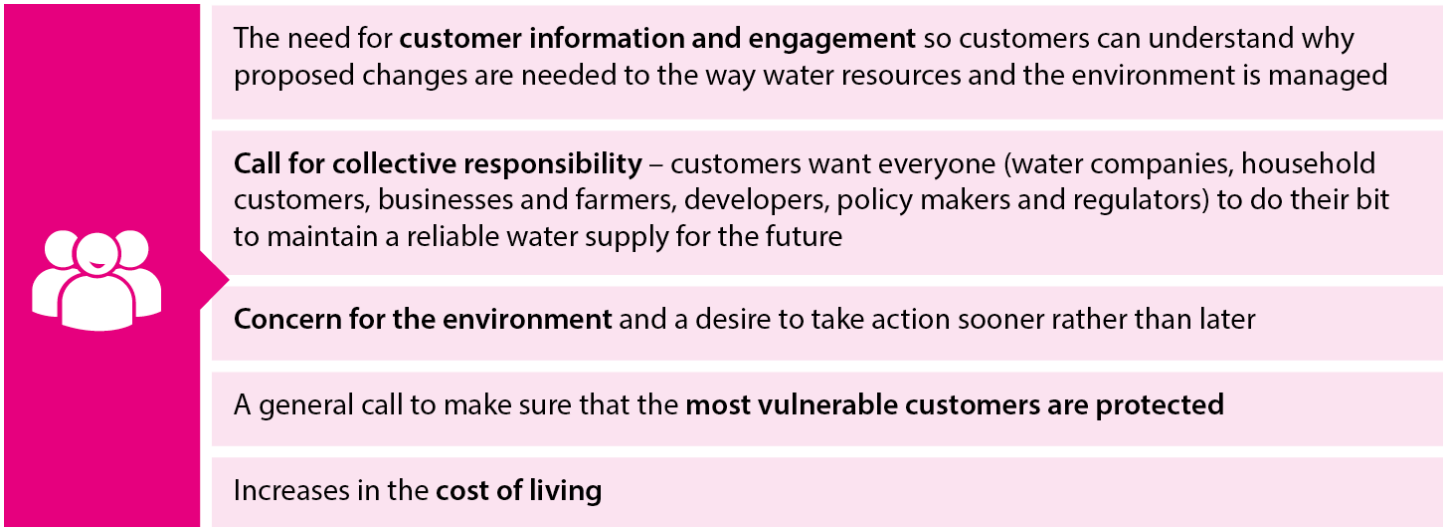
## 5.3 Setting the context for water bill affordability

**Our customers have been through a period of significant change since the start of the COVID-19 pandemic in March 2020, including the destabilising effect of the war in Ukraine. This combination of factors has led to higher levels of inflation, with households and businesses then having to negotiate increases in bills and other costs. Our research**

**programme shows that this had started to become more acute to households and influence their service preferences from the start of 2022. This led us to include cost of living as a 'golden thread' for our customers, alongside four others that we identified in 2021.**

These golden threads have been integral to shaping our plans and are summarised in figure 14 below.

**Figure 14 Our golden threads of customer preferences**




Working with Impact, our PR24 triangulation partners, we have provided a thematic review of how our customers have rated the acceptability and affordability of our AMP8 plans. More information can be found in chapter 13 of SSC11 'Thematic review analysis' published alongside this document.

Below, we summarise some key insights about how affordable customers have found their bills in the lead up to our PR24 AAT research to set the context of how they have responded to the proposed bills they will pay during AMP8.

As part of our ongoing BAU insight programme, we use our customer promises tracker study to track whether household bill-payers find their water bills affordable or not. We use the same questions as those used in CCW's Water Matters household tracker, but targeted only at the clean water element of the bill. Table 13 below shows the proportion of household customers who agree their water charges are acceptable. The insights from our customer promises tracker show that the affordability metric starts to fall back in months leading up to June 2023 to the levels seen in 2019/20. Since April 2023, more customers have started to find their water bills less affordable.

**Table 13 Proportion of household customers who agree their water bill is affordable, 2019/20 to 2023/24 (YTD)**

| | 2019/20 % | 2020/21 % | 2021/22 % | 2022/23 % | 2023/24 Q1 YTD % |
|---|---|---|---|---|---|
| Customer promises tracker surveys – South Staffs Water clean water bill | 67 | 75 | 79 | 76 | 68 |
| Customer promises tracker surveys – Cambridge Water clean water bill | 70 | 71 | 80 | 77 | 68 |
| CCW Water Matters survey combined clean water (South Staffs Water) and sewerage (Anglian Water) bill | 84 | 86 | 86 | 88 | Not available |
| Customer promises tracker surveys – South Staffs Water clean water bill | 66 | 76 | 79 | 75 | 67 |
| CCW Water Matters survey combined clean water (South Staffs Water) and sewerage (Severn Trent Water) bill | 75 | 83 | 70 | 70 | Not available |

**Notes:**

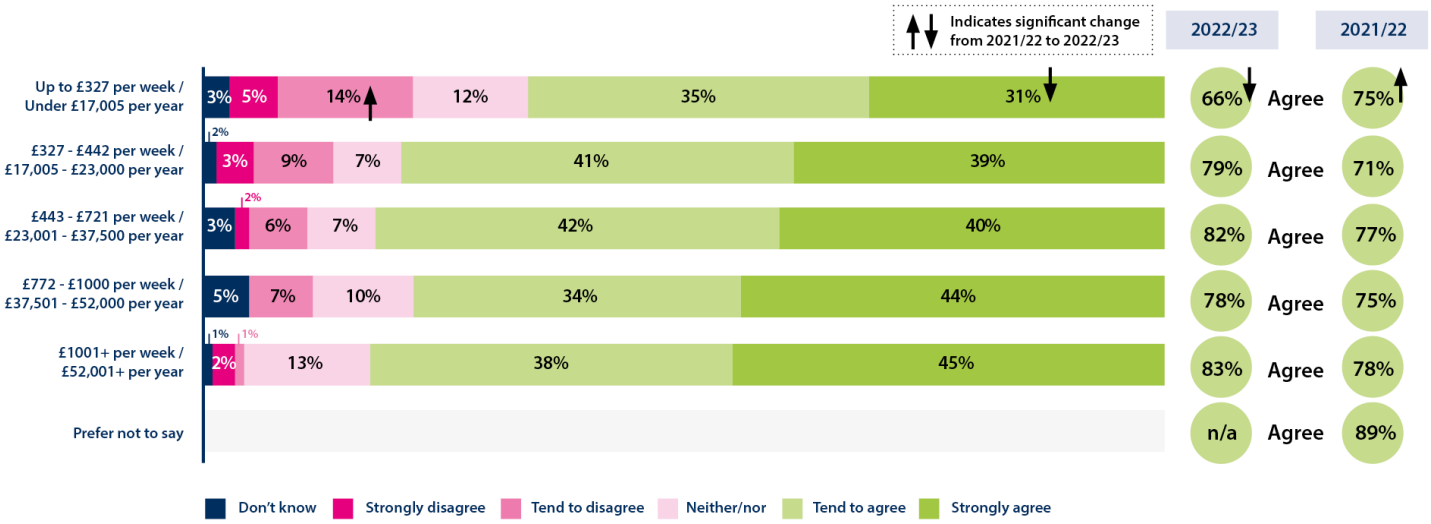
Figures exclude 'Don't know' responses.

Our customer promises tracker comprises a regionally representative sample of at least 800 surveys a year from 2019/20 and 200 surveys in Q1 2023/24. The survey methodology is 50% phone and 50% online. The insights show that the online response results are typically 18pp lower than those recorded in the phone surveys. This is partly because of a behavioural bias, with some participants not wanting to admit to not being able to afford their bills when speaking to an interviewer. We regard using a mixed methodology as an important way to avoid bias effects and track the results of each fieldwork methodology over time when assessing changes.

CCW's Water Matters survey comprises a weighted regionally representative sample of 300 surveys a year (150 for each supply region), with all surveys carried out by phone. Question asked to customers in CCW's and our tracker survey: 'How much do you agree or disagree that the water charges that you pay are affordable for you?'

During 2022/23 it is also notable that those on household incomes of less than £17,005 a year were less likely to agree their water bills were affordable than the overall South Staffs Water figure. Among this customer segment, the figure was 66%, down from 75% in the previous year. As shown in figure 15 below, this is a statistically significant change and highlights the increasing stress on the finances of lower-income households – with one in five saying their water bills are not affordable. This compares with 12% across our wider customer base.

**Figure 15 Proportion of household customers who agree their water charges are affordable (by household income) – customer promises tracker, 2022/23**




Note:
Regional representative sample of 807 household customers. Survey methodology is 50% phone and 50% online.

While the way we track affordability in our customer promises tracker is not directly comparable with the question mandated by Ofwat and CCW in the AAT research when testing the acceptability and affordability of business plans, it does provide context that more households are finding their water bills unaffordable as we moved into 2023.

## 5.4 Acceptability of our AMP8 plans

**Following Ofwat's guidance for our main AAT research, we found that acceptability for our AMP8 plans in the in-depth qualitative discussions was very strong in both regions.**

Table 14 below sets out the proportion of customers who found our plans acceptable or unacceptable in the qualitative and quantitative stages of our study. This highlights the overall majority support for our proposed plan among our customers.

**Table 14 Customer responses on the acceptability of our AMP8 plans – from our qualitative AAT research study[1]**

| Customer acceptability response to our proposed plan – proportion (%) selecting response option | Qualitative research | | | Quantitative research | | |
|---|---|---|---|---|---|---|
| | Company | Cambridge | South Staffs | Company | Cambridge | South Staffs |
| Completely acceptable | 29% | 20% | 37% | 7% | 11% | 6% |
| Acceptable | 58% | 51% | 63% | 63% | 60% | 64% |
| Unacceptable | 8% | 17% | 0% | 11% | 13% | 11% |
| Completely unacceptable | 4% | 9% | 0% | 3% | 2% | 3% |
| Don't know | 1% | 3% | 0% | 16% | 13% | 17% |
| **Acceptable/very acceptable (net)** | **87%** | **71%** | **100%** | **70%** | **71%** | **70%** |
| **Unacceptable/very unacceptable (net)** | **12%** | **26%** | **0%** | **14%** | **15%** | **14%** |

Note:

1. Table may have rounding errors.

In our qualitative research findings, we produced two potential PR24 business plans to be tested, in line with the Ofwat and CCW guidance. These were:

- our proposed, or best value plan, which includes statutory and discretionary service enhancements; and
- our 'must do plan', which details the investments required to meet all our statutory service enhancements.

We engaged with a wide range of customers to gain their feedback on these plans, taking great care to tailor the research materials, where needed, to follow the guidance. We engaged the independent Stakeholder Challenge Panel to ensure the sampling, pre-task materials shared with participants ahead of the group and the stimulus materials aligned with the guidance and were also clear and jargon-free. All the materials we used to engage customers with the pre-task and at the discussion themselves can be found in our qualitative report. We engaged with:

- 25 household bill paying and 10 small- and medium-sized enterprise (SME) non-household customers in total, using face-to-face deliberative workshops (one in each supply region);
- 16 future customers in total, through online workshops using a more focused discussion guide to avoid dis-engagement during the session (one in each supply region);
- in-depth online interviews with 9 non-household customers with 10 or more employees; and
- in-depth online and phone interviews with 16 customers in a variety of vulnerable situations.

Our qualitative study highlights that we have majority support from customers and future customers for both the plans tested, with 87% saying our proposed plan was acceptable. We had 100% acceptability among customers in our South Staffs region and 71% in our Cambridge region. The figure was 81% for the 'must do' plan, with 87% of South Staffs customers finding it acceptable – notably lower than the proposed plan. The 13% of Cambridge customers cited the following reasons for not agreeing that the plan was acceptable.

- **Water companies should pay from profits and that water profits are too high.** This highlights a minority, but consistent, level of protest voting, which we have observed in many of our studies.

- Our **plan is unaffordable/too expensive**.

- Our **plan is not environmentally friendly enough and it will not improve things or does not focus on the right areas**. Part of this is because the guidance did not allow us to go into sufficient detail about our business plan.

In our Cambridge region, 74% of customers found the 'must do' plan acceptable, which is slightly higher than the proposed plan. The notably lower acceptability of the 'must do' plan in our South Staffs region reflects the preference for the additional investment enhancements included in our proposed plan.

Customers found these proactive, relevant and important – especially given the negligible price difference each year (£3.60). The differences between the two plans tested are outlined in the stimulus materials shown to customers and focused on:

- increased investments into a higher rate of lead pipe removal;
- reducing carbon emissions; and
- further improving the resilience of the water network and assets.

The majority support for our proposed plan is evidenced when we asked participants to choose between our proposed and 'must do' plans, 74% selected the proposed plan. The main feed back was that the proposed plan focused on the right areas of water security through infrastructure resilience and begins to better address environmental wastage (leakage) and river health. The additional investments in the proposed plan are welcomed by customers and future customers, and often seen as essential; these elements showed ambition over the 'must do' plan.

Importantly, we found that customers in vulnerable situations gave similar feedback to other household customers about our plans, with the main difference being the need for us to go further to raise awareness of the eligibility criteria for financial support and the PSR. We detail how we intend to go further to support customers who may find themselves in vulnerable circumstances in section 3.3.1 on page 48.

When we completed the qualitative stage, we reviewed the findings and those from our 'Your water, your say' session held on 14 June 2023. A full review of the actions we have taken as a result of this session be found in SSC15 'Your water, your say: you said, we did'. We triangulated the findings with those from our wider customer and stakeholder research programme, which led to us making two material changes to our plan given all the feedback.

- **Customers had consistently said that our leakage ambition was not sufficient.** So, we have brought forward £4 million of leakage investment. This further stretches our leakage reduction ambition in our Cambridge regions and significantly enhances the rate of reduction in our South Staffs region.

- **Many customers were consistently telling us that they would like to see 'best value' investments delivered in renewable energy generation and energy efficiency initiatives** to help us reach net zero emissions and provide more resilience to climate change. Linked to this, they wanted us to go further on leakage and metering investments to deliver cost savings and reduce wastage. We adapted out plans, with a different pace of change on electrifying our vehicle fleet to prioritise the areas above where we could deliver best value and align to our customers' preferences.

Given the qualitative AAT feedback, we decided to take forward the proposed plan into the quantitative stage to test with our customers. The consistent response in the qualitative discussions was that the proposed plan was seen to be:

- good value for money;
- good for future generations;
- environmentally friendly; and
- focused in the right areas.

As with the qualitative stage, we took great care to follow the guidance throughout the quantitative stage, working closely with Accent and the independent Stakeholder Challenge Panel to discuss how best to develop the stimulus materials within the remit of the guidance.

In our quantitative study we surveyed 1,123 bill-paying customers. We found a lower level of acceptability for our AMP8 plans when compared with the qualitative stage. This is common in most research studies, given that during in-depth qualitative research customers can ask questions and find out more about our plans to build their knowledge. We see this evidenced by the fact that only 1% of participants in the qualitative research said they could not decide if the plan was acceptable or not, compared with 16% in the qualitative study.

Overall, among our quantitative sample, 70% of customers agree our proposed plan and the bills needed to deliver it are acceptable; 63% of all participants thought the plan was 'acceptable' and 7% reported that it was 'completely acceptable'. We found that 13% of customers said that our plan is unacceptable, with males and customers in vulnerable stations the most likely segments to give this response. Importantly, the acceptability scores were almost identical across our two supply regions – 71% in our Cambridge region and 70% in our South Staffs region.

Across all our customer sub-segments, acceptability agreement is above 60%, which indicates majority support is consistent. When cutting the analysis by household income, acceptability levels generally increased with higher income bands, with the highest level of acceptability (87%) observed in the income band of £72,800 to £103,999 a year. The lowest acceptability level (61%) is seen in the lowest income band of up to £10,399 a year. While the findings highlight that as household income increases customers tend to find our plans more acceptable – the differences in acceptability levels between the lowest and highest income bands were less noticeable than they are for affordability. We discuss this in more detail in section 5.5.

The main reasons why customers found our proposed plan acceptable are as follows.

- **Among the 70% of participants who found the proposed plan acceptable, more than half (54%) said they support what we were trying to do in the long term and 48% saying that our plan focuses on the right areas.** This highlights that many customers consider our plans address the long-term challenges we face.
- **There is little significant difference between our Cambridge and South Staffs regions, apart from in relation to two areas ('I trust them to do what's best for customers' and 'the company provides a good service now').** Here, participants in our Cambridge region were noticeably more likely to choose 'the company provides a good service now' (19% versus 12%), while those in our South Staffs region were significantly more likely to select 'I trust them to do what's best for customers' (21% versus 13%).
- **Only 6% of customers selected the option 'the plan is good value for money', highlighting the pressure customers are under, given the cost-of-living crisis and how we need to do more to communicate to our customers the value the benefits of the investments we are planning to make.** The response 'I have been dissatisfied with the service recently but am pleased that they are making improvements' also received 6% of the responses.

For the 14% of participants who found the proposed plan unacceptable, the main reason chosen was 'the bill increases are too expensive', with nearly 2 in 5 selecting this option (39%). This response was the same in both regions. The second most commonly selected option was 'company profits are too high' (32%). We also found that:

- in our South Staffs region, significantly more participants said 'I won't be able to afford this' as their explanation for the plan's unacceptability (34%), when compared with our Cambridge region (16%). This response reflects the higher deprivation levels found in the South Staffs supply area; and
- the option selected the least was 'compared to energy prices it is more expensive' which was selected by 1% of customers. This highlights the continued theme through our research that water bills are not a household bill that many of our customers worry the most about.

Returning to the notable number of customers (16%) saying they could not decide whether our plan and the water bills to deliver it are acceptable or not, household customers and those who are in lower socio-economic groups, females, those struggling financially and those without a water meter were significantly more likely to choose 'don't know/can't say' when asked to evaluate the acceptability of the proposed business plan. Our qualitative research shows that some participants wanted to find out more detail about our plan or know more about all our proposals. Examples of information customers wanted to see included:

- information on how technology and innovation will shape future plans; and
- how we will work in partnership with others, such as developers, to deliver improvements – for example, water recycling.

We conclude this lack of knowledge about our plan is a key reason why these customers were not able to give a definitive response to the acceptability of our plans.

When analysing the acceptability results by attitudinal responses, we find some significant differences of note, including:

- participants who found the plan 'acceptable' were statistically more likely to say that they do not know how much water they use but they are conscious about it;
- participants who indicated that it would be difficult to afford the combined and water only bills were significantly more likely to say they are currently feeling stressed, depressed and worried;
- conversely, participants who felt the business plan was 'completely acceptable' were significantly more likely than those who felt it was unacceptable to be optimistic and positive; and
- those who found our business plan unacceptable were most likely to agree that water is a precious resource and that they were concerned with the quality of water in rivers, streams or lakes.

When focusing on the customer responses to the three performance commitment targets mandated in the AAT guidance, we found that just over half (51%) selected reducing leakage as the most important performance commitment, followed by preventing issues with the taste, smell and appearance of tap water (35%). No significant statistical differences were seen between our Cambridge and South Staffs regions. The customer focus on leakage as a priority, reflects the common themes seen throughout our customer research for PR24, our WRMPs and our LTDS.

Reducing leakage was significantly more popular for males, more affluent households (social grade AB and C1C2), as well as those over 45, those who have a meter and those who do not struggle financially. This, in part, reflects, the greater ability of these customers to pay for leakage reduction. The overall view was that participants wanted to see more ambition on the leakage target given the "shocking" current levels of leakage, but that it was good to see us embracing technology to tackle the issue.

Preventing issues with the taste, smell and appearance of tap water was selected more often by those who are female, aged 25 to 44, those in lower social grades (DE), customers without a meter and those who struggle financially. Participants found the pace of reduction in contacts to be acceptable and to ensure we continue with the recent performance improvements in this area.

Reducing the duration of water interruptions was the least important performance commitment, with 9% of participants in our Cambridge and South Staffs regions selecting this option. It was significantly more likely to be chosen by those in financial difficulty and non-household participants. The service target shown was felt to be in line with expectations, and there were calls to ensure we have a robust pipe replacement strategy and a robust policy to protect vulnerable customers in the event of any interruptions. We have observed in our broader research and in the qualitative AAT discussions that customers were, overall, happy with our recent improvement in performance and that the proposed improvements for AMP8 were keeping the focus on maintaining our infrastructure. We see non-household customers wanting more ambition on the target given the potential impacts on their businesses.

Towards the end of our quantitative survey, we asked customer to provide their thoughts on our plan and the proposed bills in their own words. Accent's analysis of the feedback showed the following themes, which reflected the responses to the closed questions asked earlier in the survey.

- **Just over one-fifth of participants (21%) commented that they were in favour of the plan because it was beneficial for the future.** Other positive comments included the following themes: acceptability of the increase (9%) and happiness with current service (6%).

- **Many of the concerns expressed were financial, with the most common being worries about affordability (10%).** Other financial concerns included cost of living and inflation (9%), the existing cost of bills being too high (5%) as well as the proposed cost increases (5%).

- **Some participants put forward thoughts on the topics of management and responsibility**, such as the suggestion that profits and shareholder dividends should be reduced (15%), that customers should not have to pay for investment (8%) and that companies should take greater responsibility to offer a better service (5%).

- **Comments from participants also focused on investment**, with either general calls for investment (8%) and upgrading of infrastructure (3%), or investment in specific areas such as managing leaks and water quality (8%) or protecting the environment (14%).

- **7% of participants mentioned that the focus should be on the customer with good customer service and support.** On a similar theme, 4% of participants noted that they were unhappy with their current services.

Throughout our qualitative research, we asked participants to review our plans from different perspectives; as a bill payer, a service user, as a citizen and from a national societal perspective to understand how this impacted on their views of our plan. Accent moderators prompted participants to think about these different perspectives throughout the discussions and wear these 'different hats'. Through the discussions we observed that participants naturally tended to adopt these different perspectives depending on a number of different factors.

- **Environmental position.** Those with strong environmental views spontaneously thought about our performance and their environmental responsibilities. These customers were more likely to call for greater investment in these areas.

- **Personal service experience.** Those who had experienced problems with our service (such as leakage or water quality issues) automatically talked about their issues as a service user and how they had been affected. This led

them to focus on these specific issues where being shown our plan – for example, non-water dependent businesses wanting to see more ambition on supply interruption reductions.

- Level of altruism. Some thought about other people who might have service issues, who might not be able to afford their water bills, or who might be in vulnerable circumstances. This led to some customers, for example, choosing a neutral position when asked if the water bills to deliver service improvements were affordable, even when they could afford the increases themselves.

- View on value of money water bill affordability. Perspectives changed dependent on the baseline affordability of the water bill, such as those who are currently finding their current water bill affordable being more likely to find the future bills affordable.

## 5.5 Affordability of our AMP8 plans

**Following Ofwat and CCW's guidance for our AAT research we find that, in the task at the end of the in-depth qualitative discussions, customers' views about water bill affordability are mixed when considering the combined water and sewerage bills.**

As shown in table 15 below, 38% of customers in our Cambridge region and 39% of customers in our South Staffs region say their AMP8 combined water and sewerage bills would be 'easy' or 'very easy' to afford, with 38% of Cambridge customers and 22% of South Staffs customers saying it would be difficult. These figures are for the proposed plan shown to customers in the sessions.

Neutral responses are particularly notable in our South Staffs region at 39%, with 21% in Cambridge. These were clearly and consistently driven by range of factors, including the question phrasing and cost-of-living increases. This meant customers did not want to commit either way. The key themes noted in the in-depth qualitative discussions included:

- customers viewing the research through a citizen's lens and being concerned about others being able to afford their bills;
- customers viewing the research through a bill payer's lens and being unable to predict future income or outgoings;
- customers who can afford to pay their water bills, but who disagree with increases to fund investment, with some saying that funding should come from cost efficiencies or profits;
- customers with a view that investments should come from companies and not customers, particularly in the light of perceived service failures discussed in the media and politically;
- customers who want more information before they commit to making a decision, partly as an outcome of us being restricted to only showing customers the aspects of our plans as mandated in the Ofwat/CCW guidance; and
- non-household customers in particular saying the issues being discussed did not affect their business.

When commenting on the affordability of the combined water and sewerage bills for the 'must do' plan, only 11% of customers said they would find it 'difficult' or 'very difficult', compared with 29% for the proposed plan. We find similar numbers saying it would be 'easy' or 'very easy' to afford, which is similar to the 38% for our proposed plan.

**Table 15 Bill payer customer responses on how easy/difficult they find their AMP8 combined water and sewerage bills – from our qualitative AAT research study[1]**

| Customer affordability response to our proposed plan – proportion (%) selecting response option | Combined water bills – current bill | | | Combined water bills – proposed bills for 2025/30 | | |
|---|---|---|---|---|---|---|
| | Company | Cambridge | South Staffs | Company | Cambridge | South Staffs |
| Very easy | 26% | 29% | 24% | 15% | 17% | 14% |
| Easy | 26% | 33% | 21% | 23% | 21% | 25% |
| Neither easy of difficult | 24% | 24% | 24% | 31% | 21% | 39% |
| Difficult | 18% | 10% | 24% | 23% | 25% | 22% |
| Very difficult | 6% | 5% | 7% | 6% | 13% | 0% |
| Don't know | 0% | 0% | 0% | 2% | 4% | 0% |
| **Easy/very easy (net)** | **52%** | **62%** | **45%** | **38%** | **38%** | **39%** |
| **Difficult/very difficult (net)** | **24%** | **15%** | **31%** | **29%** | **38%** | **22%** |

Note:

1. Table may have rounding errors.

Moving to the quantitative study, as shown in table 16 below, 25% of customers in our Cambridge region and 12% of customers in our South Staffs region say their AMP8 combined water and sewerage bills would be 'easy' or 'very easy' to afford, with 32% of Cambridge customers and 51% of South Staffs customers saying it would be difficult. Overall, this means 47% of our customers think they will find the combined bill difficult to pay. These figures are notably lower than in the qualitative study, particularly in our South Staffs region. This reflects the higher levels of deprivation across the region.

**Table 16 Bill payer customer responses on how easy/difficult they find their AMP8 combined water and sewerage bills in our quantitative survey – from our qualitative research study[1]**

| Customer affordability response to our proposed plan – proportion (%) selecting response option | Combined water bills – current bill | | | Combined water bills – proposed bills for 2025/30 | | |
|---|---|---|---|---|---|---|
| | Company | Cambridge | South Staffs | Company | Cambridge | South Staffs |
| Very easy | 8% | 14% | 7% | 3% | 5% | 3% |
| Easy | 22% | 26% | 21% | 11% | 20% | 9% |
| Neither easy of difficult | 46% | 45% | 46% | 36% | 42% | 35% |
| Difficult | 16% | 11% | 18% | 34% | 25% | 37% |
| Very difficult | 5% | 3% | 6% | 13% | 7% | 14% |
| Don't know | 2% | 1% | 2% | 3% | 2% | 2% |
| **Easy/very easy (net)** | **30%** | **40%** | **28%** | **14%** | **25%** | **12%** |
| **Difficult/very difficult (net)** | **21%** | **14%** | **24%** | **47%** | **32%** | **51%** |

Note:

1. Table may have rounding errors.

Our view is that this difference is partly likely driven by customers not having time to discuss, ask questions and find out more about our plan. Many customers (34%) provided a neutral response to whether they find the combined water and sewerage bill for AMP8 affordable. The main customer segments giving this response are:

- household customers, rather than non-household customers;
- household customers with an income of less than £10,400 a year;
- customers in our South Staffs region – in particular, those who are not in the AB socio-economic group or those who are under the age of 55;
- those with a health condition or other form of vulnerability – in particular, those with medical conditions who rely on having a high-quality and reliable water supply;
- customers who do not have a water meter; and
- female customers.

We also find that affordability decreases as income declines. Participants on lower income bands reported a significantly higher degree of difficulty when it comes to being able to afford the combined water and sewerage bill, especially those who earned under £26,000 a year. 80% of those in the lowest income band (under £10,399 a year) said it would be difficult for them to pay for the projected combined bills, while for those who earned more than £104,000 a year, this number was only 10%. In addition, 58% of participants with a water only bill amount of between £175 and £249 indicated that they would find it challenging to afford the proposed bill; this is significantly higher than those with bills smaller than £175 or larger than £249.

When asked about the changes participants would need to make to pay for the increase in their water bills, the majority (61%) said they intended to reduce their expenditures on non-essential items, with the second most common strategy being a reduction in household fuel consumption (39%) and the third on spending less on food and essential items (38%). Around 38% of participants believed they would also need to eat out less.

The only significant difference between participants from our Cambridge and the South Staffs regions was in reducing household fuel (gas/electivity) use. This was an option South Staffs participants were significantly more likely to choose (41% versus 31% for Cambridge). This mirrors the feedback from our community engagement, which points towards increased fuel poverty in parts of our South Staffs region.

Aside from 'other' and 'don't know', the least popular option was asking friends and family for financial support, with only 10% of participants selecting this option.

Towards the end of the quantitative survey, after we had informed customers about the investments in our plans and our targets for the three mandated performance commitments, we asked the same question about the affordability of our AMP8 clean water bills only.

Table 17 below highlights that most customers (40%) provided a neutral response to whether they find the AMP8 clean water bill affordable; 19% of bill payers saying it would be 'easy' or 'very

easy' to afford, with 35% saying it would be 'difficult' or 'very difficult' to afford. When comparing this to the combined bill affordability response (14% and 47%, respectively) we do see a 12-point reduction in the numbers of customers saying they would find the bills be 'difficult' or 'very difficult' to afford.

The customer segment responses were broadly similar to the combined bill, with the same customer groups significantly more likely to say it would be 'difficult' to afford our clean water bill – that is, those aged 25-34, females, household participants (compared to non-household), participants in lower social grades, those with health issues, those who struggle financially and those without a meter. Again, those in lower income brackets experienced notably greater challenges in affording the water only bill, particularly those earning less than £10,399 a year. A striking 70% of those in the lowest income bracket (earning under £10,399 a year) expressed difficulty in affording the projected water only bill. In contrast, for those in the highest income band, this figure was 8%. **It is important to note that feeding back on the acceptability of our plan, the majority of customers (74%) supported our proposed plan and the bills required to deliver this.**

**Table 17 Customer responses on how easy/difficult they would find it to afford our AMP8 clean water bills – from our quantitative AAT research study**

| Customer affordability response to our proposed plan – proportion (%) selecting response option | Water only bills – proposed bills for 2025/30 | | |
|---|---|---|---|
| | Company | Cambridge | South Staffs |
| Very easy | 3% | 6% | 2% |
| Easy | 16% | 20% | 15% |
| Neither easy of difficult | 44% | 45% | 44% |
| Difficult | 27% | 22% | 29% |
| Very difficult | 8% | 4% | 8% |
| Don't know | 3% | 3% | 2% |
| **Easy/very easy (net)** | **19%** | **26%** | **17%** |
| **Difficult/very difficult (net)** | **35%** | **26%** | **37%** |

We have worked with Accent to analyse the survey data provided by all customers to try and identify what proportion, based on answers to a range of questions in the survey, are most likely to require financial support from us to be able to afford their clean water bills during the five years from 2025 to 2030.

## 5.6 Customers' views on phasing our AMP8 bills

**A key part of our customer research involved gaining a robust understanding of our customers' views on intergenerational fairness and the phasing of long-term investments. This included research with household, non-household and future customers, with a specific focus on making sure we reached harder-to-engage customers, such as the principal decision-makers within large businesses and customers on our PSR.**

Our research approach focused on the following areas.

- Testing levels of investment for ten specific ambition areas, with a focus on customers' preferences over the timings of these investments to unlock the benefits they will deliver. We have worked with Impact to assess customer preferences for delivering the ten ambitions that sit at the heart of our LTDS. This allowed for robust sensitivity and stress testing around the central outputs. SSC33 'Impact – SSC LTDS triangulation report' published alongside this document outlines how we triangulated multiple data sources to develop a decision-making framework that we have used to inform the phasing of LTDS investments to 2050. This framework brings in insight from across a range of studies, including our LTDS ambition and strategy research, research for our WRMPs and a targeted study into our net zero ambitions. It also makes use of feedback from our LTDS research, where customers used trade-off sliders on their preferences for different ambition areas in terms of wanting to keep bills low versus the need to invest more quickly.

- Testing bill profile scenarios for investments up to 2050, carried out through several research studies, including WRMP local and regional sessions, customer priorities tracker qualitative sessions and our AAT research.

These research studies have shown a consistent majority preference for an even, natural bill profile. The key consideration for customers is that this is 'fairest for all generations' and also helps to prevent bill shock. But customers are also looking for an investment approach that ensures key risks are mitigated and not left to emerge at a later date.

Our LTDS and AMP8 bill profile reflects the preferences of the majority of our customers, balancing the voices of those who want to delay investments because of the rising cost of living and not wanting to see water bills rise in the same way as energy bills; and those who have a strong environmental focus and who want investment now to address those challenges.

## 5.7 AMP8 bill profile

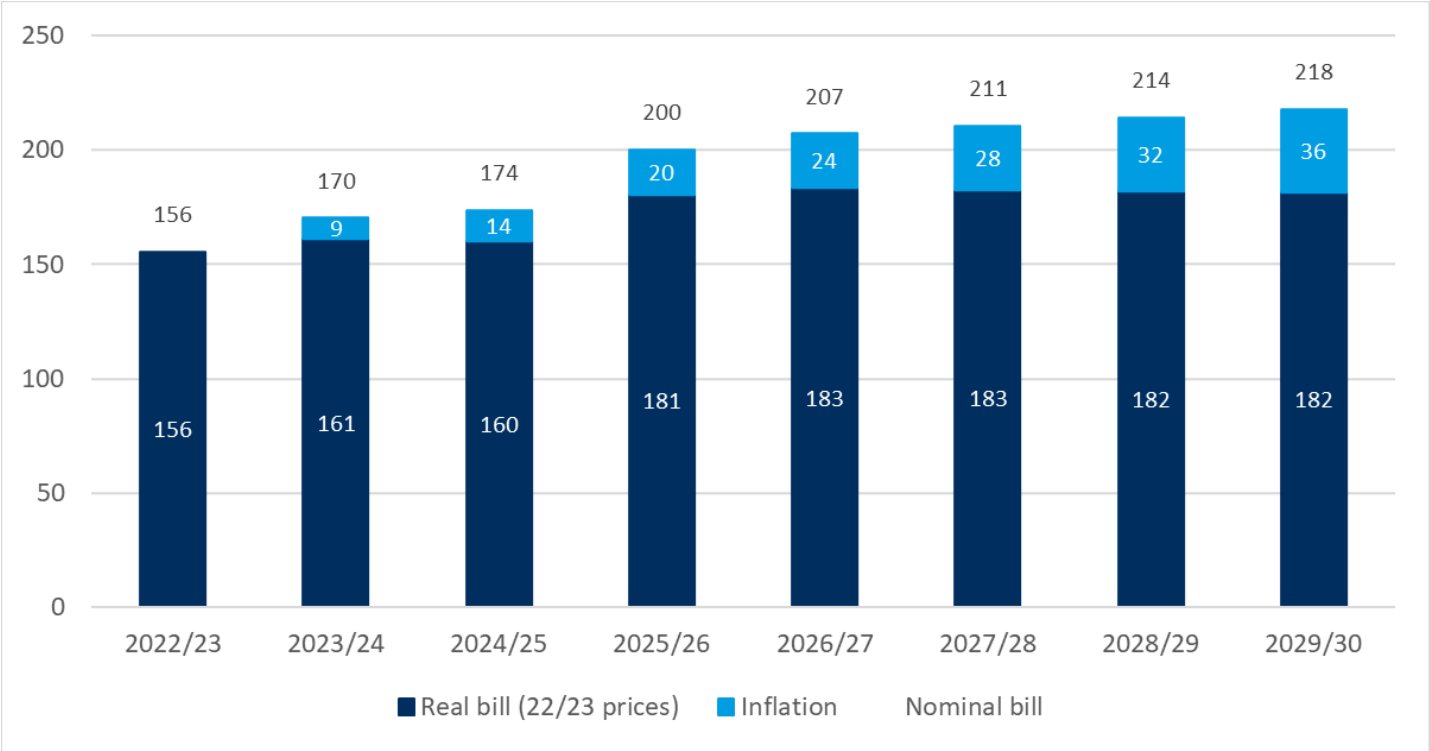
**Figure 16 below shows the average bill our customers will pay from now to 2030. In real terms, the bill rises from £156 in 2022/23 to £218 in 2029/30, with £36 of the increase from our assumptions for inflation.**

Customers in our Cambridge and South Staffs regions pay, on average, among the lowest water bills in England and Wales. We know they always expect value for money for the services we deliver. We have implemented best value planning approaches by selecting 'no' and 'low regret' investment options only and appraising multiple solutions for each to ensure we select the best value investment options for our customers. We have also used third-party support to ensure our expenditure forecasts are robust and efficient. So, we are confident that this business plan delivers best value for our customers and does not raise bills higher than necessary.

But inflationary pressures, such as increasing power costs and the need for increased investment to secure the supply of water we need now and in the future means that our customer bills will rise by 25% during AMP8. We tested this bill profile as part of our AAT engagement and the majority of customers found the plan to be acceptable and were supportive of the need to increase bills to ensure intergenerational fairness over the long term. We note that some customers were concerned about the affordability both of our current bills and our future bills. So, we are already working on increasing the support available for customers struggling to pay during this AMP and into AMP8. We discuss this in more detail in section 3.3.1 on page 48.

We are acutely aware that significant long-term investment is needed of both the water and wastewater industry. In partnership with Anglian Water, we are developing a strategic resource option – the Fens reservoir – to secure sustainable, long-term water resources for our Cambridge region. This project will impact customers' bills, so we have been carrying out extensive work to ensure this is the best value solution for the need. We are confident the reservoir proposed is the right solution, but the scale and treatment of costs for development works in AMP8 is still highly uncertain. We do not want to raise customers' bills higher than necessary, so we are working closely with Ofwat and with Anglian Water to ensure we deliver the solution in the fairest way for customers across the East of England. Our bill profile does not currently include the impact of these costs. Further information on this can be found in SSC03 'Fens reservoir – our approach into AMP8'.

**Figure 16 Household bill profile, 2025 to 2030**



# 6. Delivering outcomes for efficient costs

Our focus for this business plan is on securing the future water for all our customers and communities, and for the environment. We will do this by making sure we always deliver the services our customers have told us they want – and that they are willing to pay for. It is also important for us to demonstrate clearly that we always do this efficiently – and that we deliver both value for money and value for society.

Over the course of AMP8, we will invest and spend around £819 million in services that exceed customers' expectations and infrastructure that is resilient to the challenges we face in the future, including climate change and population growth. We will also continue to enhance and protect the environment, making sure we leave it in a better state for future generations. And we will continue to do this efficiently, reflecting our role as the provider of an essential public service.

This chapter should be read in conjunction with chapter 3, 'An ambitious plan for customers and the environment', on pages 34 to 67.

## 6.1 Developing a best value investment plan

**We recognise the importance of developing a best value investment plan and also to set our AMP8 plans within the context of a long-term delivery strategy. This shift by Ofwat to focus on more long-term planning has given us the opportunity to improve our asset management maturity. Many of the approaches, tools and models we have used to develop our plans are designed to inform both a short- and long-term view. This has helped to create an inextricable link between our asset management plan, business plan and LTDS.**

Since PR19, we have taken a series of significant steps forward in our approach to asset management. These improvements have covered everything from improving the quality of our data to re-structuring our asset management team – and implementing new tools and technologies. The aim is to better establish good asset management practices across the business over the long term. We have also prioritised maturity improvements that have enabled us to deliver the best possible business plan for customers, stakeholders and the environment, including:

- carrying out a thorough quantification and assessment of the hazards and risks consistently across our entire asset portfolio;
- implementing an updated value framework within our Copperleaf H2O portfolio optimisation tool (see case study on page 41 for more detail);
- developing a new model for depicting mains bursts based on machine learning principles; and
- developing a new model for determining levels of potable water storage within all our supply zones across the Cambridge and South Staffs regions.

Using these capabilities, we have developed our most detailed business plan using a bottom-up and top-down approach. This brings together data and information about our asset health and performance with predictive models and future scenarios, all aligned with Ofwat's common reference scenarios for water companies' long-term delivery strategies. The process we have followed has been assured by an independent third party and we are confident that this has helped us to develop a best value plan.

We have also taken into account the recommendations from Ofwat's asset management maturity assessment, published in September 2021. In table 18 below, we set out how addressed each of the recommendations.

**Table 18 How we have addressed the recommendations in Ofwat's asset management maturity assessment**

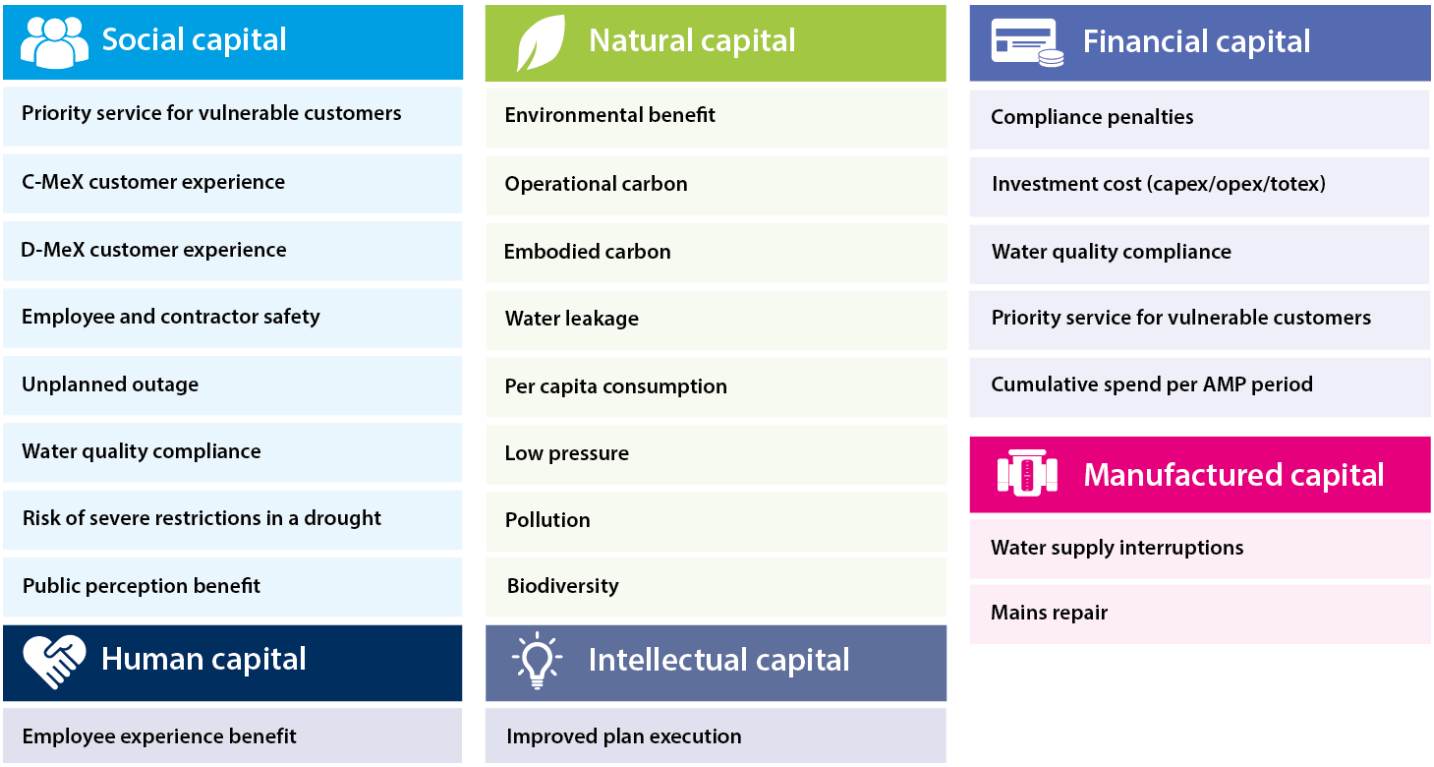
| Ofwat asset management maturity assessment recommendation | Action we have taken |
|---|---|
| **Recommendation 1:** Develop a clear framework to demonstrate how current processes fit within an asset management system. Include wider consideration of uncertainty within plans, beyond WRMP and water treatment interventions | Our approach to developing ourAMP8 business plan is integrated within our asset management system. The tools, processes, systems and data we have used in developing our business plan are now key parts of our approach to asset management. We have also embraced Ofwat's LTDS principles and added uncertainty analysis to our planning processes and tools. |
| **Recommendation 2:** Develop evidence on how risk data is applied in decision-making to ensure consistency across different asset types. Improve quantification of risk across all areas. | We have adopted a single approach to the quantification of risk and value throughout the decision-making process. We have based this on an industry-accepted six capitals framework with our bespoke monetary values. In addition, we quantified risk and value from the outset. We also reported the outputs from the risk and value framework to senior leaders across the business and reviewed them in a series of workshops. |
| **Recommendation 3:** Enhance capability to monitor asset health information and trends, particularly for assets with high consequences of failure, to inform maintenance and investment planning. Consider a quantitative approach to consistently incorporate the wider value of asset health and resilience to a decision-making framework. | We have included an enhancement case in our plan to improve network monitoring so that we can collect important data about the health of our assets. Our new and updated PR24 models have assessed our resilience to climate change, demand changes, abstraction reductions and technological changes. And we have added new parameters for these models where there is a material impact – e.g. soil moisture content in our IRE model. |
| **Recommendation 4:** Develop a formalised risk escalation process that can be used consistently across the organisation, including escalation to Board. Improve evidence of Board and senior management engagement planning. | We have developed dashboards to present risk and value outputs to the Board and senior management team. These present risk scores and risk summaries that can be analysed quickly. In addition, we have used our geospatial system to present map views of our investment plan and constituent risk information to the Board and senior management team. And we have set risk tolerances across asset type and risk tolerances. Risks above this threshold were escalated to the senior management team. |
| **Recommendation 5:** Consider further development of approaches to identify and address gaps in asset management capability and resources for employees. | We have made significant investment in our asset management team since the publication of Ofwat's asset management maturity assessment, filling gaps in our knowledge and capability. We have also ensured our people have been trained in the use of new models and processes for investment planning and business case authorship. In addition, we have implemented good practice asset management capabilities throughout the business. Our people are using the new risk and value framework to build individual investment plans and business cases. |

More detailed information can be found in SSC37 'Our asset management approach to best-value investment planning through 2025 to 2030 and beyond' published alongside this document.

### 6.1.1 Our risk and value framework

For PR24 we have developed and implemented a new risk and value framework using the six capitals approach (social, financial, intellectual, human, manufactured and natural capital) and aligning this with our performance commitments. This is illustrated in figure 17 below.

**Figure 17 Our Six Capitals value framework**




Using this framework has enabled us to justify the value each investment would offer us, our customers and stakeholders. We have used the outputs to inform our customer engagement and describe the choices that can be made within the overall investment portfolio. It incorporates the following processes.

- Risk quantification. We have applied the framework to all the risks we identified, which were then scored against a traditional set of risk categories.
- Option assessment (multi-criteria analysis). Once the risks that fell within our tolerance levels were removed, we developed the remaining risks into full schemes, with a longlist of options. We then applied multi-criteria analysis (MCA) to each of the options, using the six capitals approach outlined above. Outputs from this were used the filter the longlist into a shortlist.
- Value appraisal (also known as a cost-benefit assessment). We carried out a full value appraisal for schemes on the shortlist to ensure a consistent value assessment across the whole investment portfolio.
- Variables. We then monetised the risks associated with the options by multiplying by a financial variable. One set of financial variables, for example, covers our private costs associated with each measure. Another set covers our customer willingness to pay costs, while a third considers societal value.
- Financial model. After costs are added to the options for each scheme, the financial outputs for the schemes and the portfolio can be reported. This includes reporting metrics such as the net present value (NPV) and benefit cost ratio (BCR). We carry out all our cost-benefit assessments over a 40-year timeframe, including re-investment cycles and changes in operating expenditure (opex).
- Optimisation. The optimisation process we followed allowed us to test customer preferences against different versions of our AMP8 investment plan and demonstrate the value of the choices between key measures, such as maintaining burst performance versus improving the environment.
- Visualisation and decision-making. Our risk and value framework has enabled us to present investment options and choices in a consistent manner, taking into account the interaction between the results from the quantitative assessment and our people. This has helped to drive our decision-making.

### 6.1.2 Risk and asset modelling

We continually monitor risks across our entire asset portfolio, using our Maximo works management system to capture and manage any potential risks. For PR24 we carried out a one-off activity to refresh our entire risk database for every class of assets to ensure a thorough and up-to-date view of the potential investment required to achieve our long-term outcomes. We captured all the risks and quantified them against our risk and value framework. We endeavoured to use data and models to identify these risks and even developed new models for areas of higher risk, based on our current

performance and future outcomes. We used a range of methods and models as part of our risk refresh, including:

- expert reviews, using the knowledge, training and skills of our people to identify potential asset failure risks;
- hazard reviews of all our water production sites and reservoirs;
- a supply zone resilience model to assess the level of emergency water storage we have in each of our water supply zones;
- a well-established infrastructure deterioration model to identify the current and future risk profile of our small diameter distribution mains; and
- a non-infrastructure deterioration model to project the refurbishment and replacement cycles for our water treatment works and groundwater source stations.

## 6.1.3 Systems thinking and identification of needs

As part of our planning for PR24, we have set out to create an environment where asset experts can rethink the way infrastructure is operated and propose sustainable, long-term investment solutions. To consolidate the risk inputs that had been captured, collated and scored across the whole business, our Asset Management team facilitated 'systems thinking' workshops, bringing together expertise from across our water production, water resources, water quality, networks and capital delivery business functions. The aim of these sessions was to ensure captured risks were viewed holistically, giving everyone involved a deep understanding of the interdependent nature of our infrastructure and non-infrastructure asset base.

Within these systems thinking workshops, we examined our Cambridge and South Staffs networks as they are currently operated, reviewing the risks and challenging ourselves to:

- identify the root cause, including any links to other risks;
- develop zonal solutions that address the root causes of the risks;
- consider further uncertainties, such as growth, demand and climate change;
- proposed investment that is adaptive and that can respond to change;
- link risks and proposed solutions to long-term outcomes; and
- identify investment dependencies, efficiencies and impacts.

We also considered the following inputs.

- Water quality. This is driven by risks identified in our Drinking Water Safety Plans. We reviewed this in the context of the CRI and the acceptability of water to customers within the supply zones in question. We also reviewed the potential risks to the acceptability of water that may arise as a result of us transferring water between different supply zones.
- Unplanned outages or interruptions to supply. This covers both infrastructure and non-infrastructure assets. We reviewed a range of inputs, including source stations outage, historic burst rates and the number of bursts per kilometre within each zone.
- Long-term position for each water resource zone. This includes future demand forecasts, as well as the deployable output, supply/demand balance and leakage position from our WRMPs. It also includes regulatory changes and the capabilities and constraints associated with the transfer of water between supply zones.
- AMP7 investment proposals. This is to identify any mitigating risks around existing schemes and when they will be delivered.
- Hydraulic models. We use these models to simulate failure scenarios to better understand our asset resilience, which we then link with our work on storage resilience.

Given that so many people from across the business were involved in our systems thinking workshops, the outputs were diverse – ranging from specific infrastructure and non-infrastructure assets, strategic supply capability and more generic strategies relating to our internal processes, such as emergency planning. We found this process helpful in:

- identifying the knowledge and experience of our people;
- highlighting areas for improvement;
- facilitating a joined-up approach across our business; and
- fostering a culture of collaboration across different teams and functions.

## 6.1.4 Solution appraisal and costing of our investment plan

In tandem with our needs and solution identification process, we have developed increasing maturity of the associated costs across our base and enhancement investment proposals. We have maintained a level of rigour within the optioneering process outlined above through the long- and shortlisting of different stages. This includes using different costing approaches across the investment plan, primarily to distinguish between our water quality and resilience driven investment proposals and those established through our WRMP and WINEP obligations.

We have also looked across different approaches to ensure consistency and in developing confidence that our approach is appropriate in generating efficient and validated costs. And we have applied the same assumptions for direct and indirect costs across our investment plan, centralising our overheads and capitalising costs to ensure a consistent approach and support an ongoing understanding of the expenditure required to deliver our proposed programme. Within our investment planning system, we have applied these cost forecasts for any capital expenditure (capex), as well as any opex required to

deliver and maintain the solution with the first year of the asset being operational.

We engaged a third-party engineering consultancy called Aqua Consulting to ensure options and costs were developed robustly and efficiently, while also having regard to Ofwat's PR24 enhancement criteria. We have subjected business needs with an enhancement driver to a process where drivers were quantified within an internal problem statement. These formed the basis of a series of options included within the longlist stage. This included confirmation with stakeholders of the need, as well as the solutions that would meet the needs of our business and our customers.

We have also carried out multiple criteria assessment to determine appropriate shortlist options, focusing on:

- the ability to meet project drivers and regulatory compliance;
- providing a long-term solution for the business;
- providing green solutions;
- technical feasibility;
- deliverability; and
- cost.

We selected schemes that scored highly in these areas for further cost estimation and inclusion in this business plan.

We have determined the costs associated with each of the proposed investments through a number of different means.

We have following a defined hierarchy for determining the cost associated with each investment. For example, the costing approach we have used to determine our capex uses, in order of preference:

- a parametric cost modelling approach supported by bottom-up costing;
- costs based on recent purchase or undertaking the same or a similar scheme;
- costs obtained either by internal or experts based on a more detailed design scope of the proposed scheme;
- costs modelled through Atkins' expertise using a sector recognised tool, such as TR6115; and
- a benchmarking exercise carried out by Gardiner & Theobald on a representative sample of our base and enhancement programmes.

We have used the most detailed costing approaches with the highest level of certainty for our most complex and material investments to ensure the data underpinning our plans are robust. This includes, in particular, our enhancement expenditure. For our base expenditure, where costs are less material in the context of our overall expenditure, we have tended to use the costs of recently purchased items or work undertaken. This has given us a level of certainty that our costs are aligned with the level of complexity and risk associated with our investments.

We illustrate our cost validation process in and detailed costing process in figures 18 and 19 below.

**Figure 18 Costs validation process**

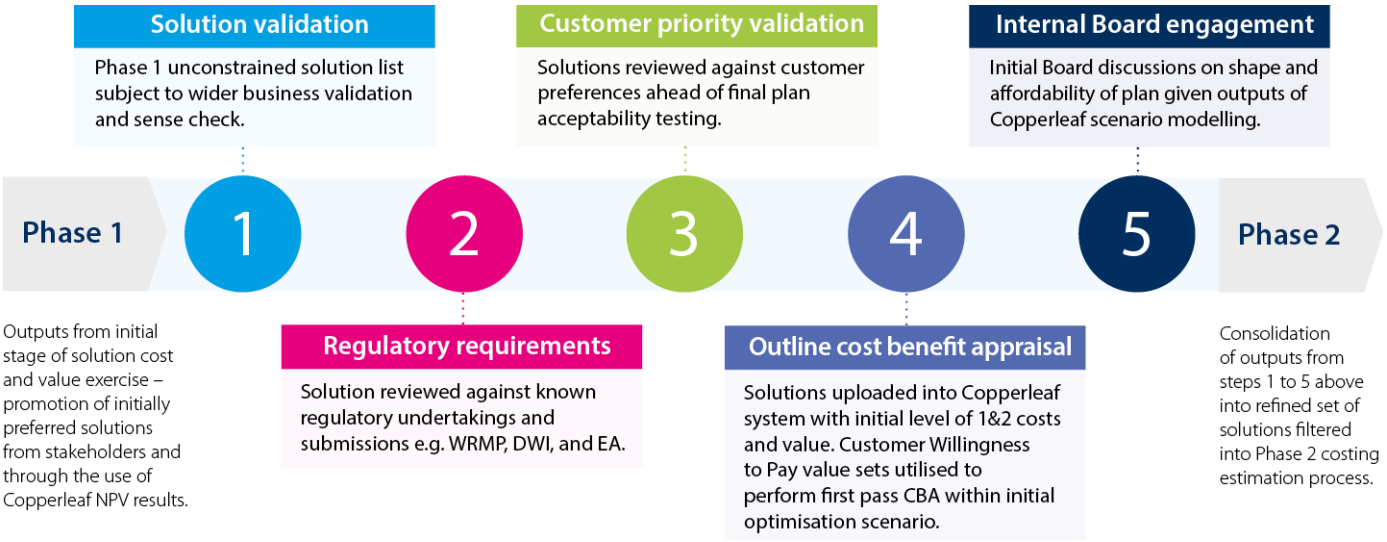
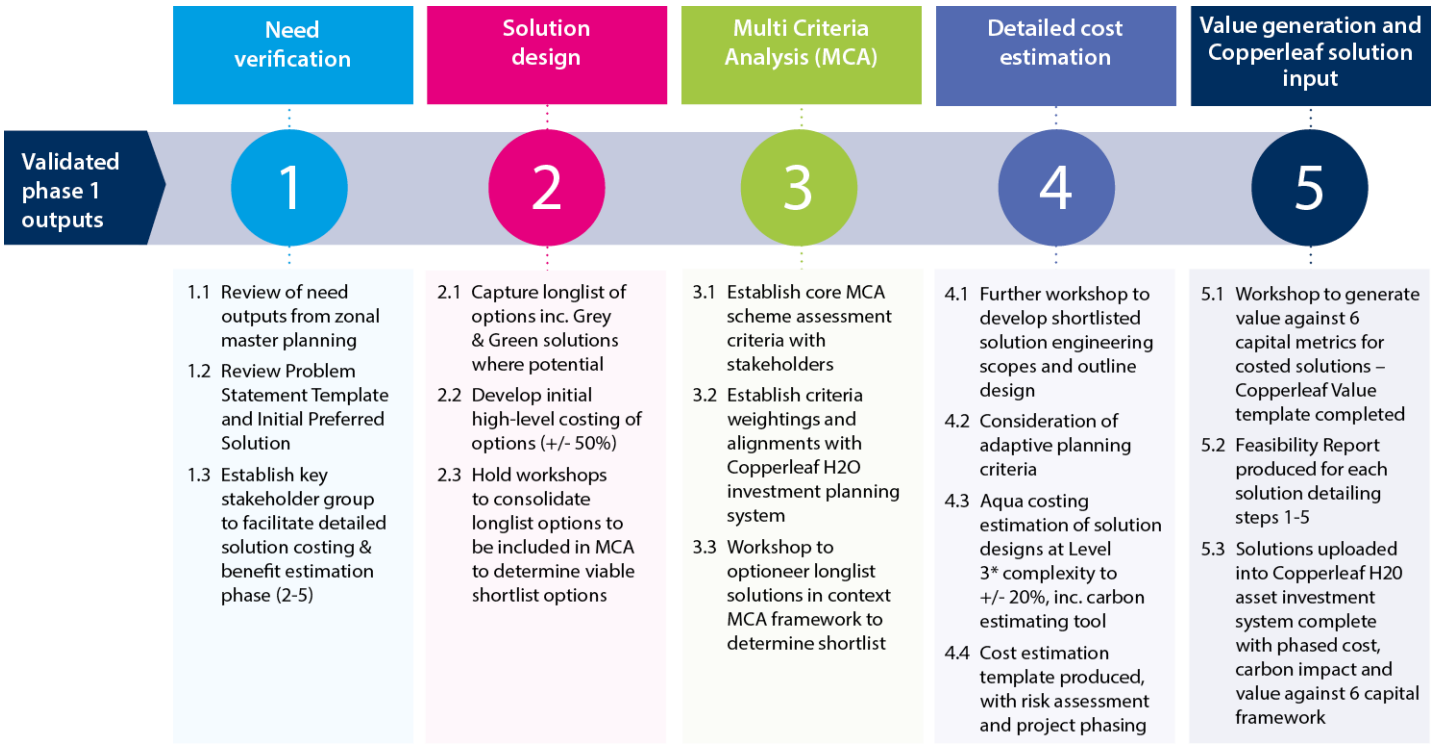


**Figure 19 Detailed costing process**




### 6.1.5 Optimisation of our investment plan

Having carried out our bottom-up approach to identifying both our investment needs and the potential solutions to address them (as identified in sections 6.1.1 to 6.1.4 above), we wanted to ensure we adopted a balanced and transparent process in generating a final investment plan. We also wanted to create a visible link to our decision-making in this regard, using an approach which balances service and cost. The process we have used builds on the recommendations of Ofwat's asset management maturity assessment, as follows.

- When we completed the options development for the whole investment plan, we update Copperleaf H2O with the new costs, benefits and other information that improved our assessment. This is to ensure our final portfolio decisions have been made on a consistent basis.
- We ran many optimisations in parallel with the development process for the investment plan. These optimisations improved over time as we received more detailed information on costs and benefits. We presented all optimisations to the Executive team and other senior leaders – utilising cost and performance constraints relative to our high-level PC ambition to generate an optimal plan that delivers best value for the least cost for our customers.

## 6.2 Components of our investment plan

**Our investment plan sets out the total expenditure (totex) we think we will need to deliver the outcomes for our customers, stakeholders and the environment during AMP8, in line with our long-term ambitions.**

In table 19 below, we set out the components of our investment plan, which we then discuss in more detail in the following sections.

**Table 19 Components of our AMP8 investment plan**

| Expenditure category | Expenditure component |
|---|---|
| Base expenditure | Power costs.<br>Other operating expenditure – the fixed and variable day-to-day costs of running the business, including payroll, equipment and inventory costs.<br>Infrastructure renewals expenditure (IRE) – the costs associated with maintaining or restoring operational capability of infrastructure assets.<br>Base capital maintenance.<br>Network reinforcement.<br>Business rates and abstraction charges. |
| Enhancement expenditure | Mandatory schemes – e.g. Grafham transfer, metering strategy and water quality schemes with DWI Notices.<br>Non-mandatory schemes – e.g. lead strategy, smart networks, carbon reductions and extended leakage ambition. |
| Retail expenditure | Transaction costs associated with delivering a retail service for customers – e.g. billing services, metering.<br>Debt costs. |

### 6.2.1 Base expenditure

Base expenditure describes those costs that are essential for the day-to-day running of our business. It covers a number of different functions, as outlined in table 19 above. During AMP8 we will invest £150 million net capital expenditure to maintain our non-infrastructure assets for long term. We will also invest £84 million net to maintain our infrastructure assets. We discuss our plans in more detail in section 3.1 on pages 34 to 41.

### 6.2.2 Enhancement expenditure

We will invest £140 million net capital expenditure to enhance our assets to ensure we continue to supply customers with high-quality and resilient water supplies now and over the long term. We discuss our enhancement proposals in more detail in chapter 3 on page 34 (specifically, sections 3.1, 3.2 and 3.5).

We will apply price control deliverables (PCDs) to 15 enhancement investments. We have designed our PCDs to protect customers against non-delivery of funded enhancement schemes and, where appropriate, to apply late control period delivery and late in AMP phasing delivery penalties. Late delivery will apply a time value of money to the cost of capital. This, in turn, will be added to the full enhancement funds for a particular scheme in the event of non-delivery.

We have grouped our PCDs into six categories. These incorporate all 15 enhancement investments identified where performance commitments or ODIs do not provide a clear direct link or any easy-to-measure benefit. The six categories are:

- supply resilience;
- storage resilience;
- 'smart' water system trial;
- lead;
- WRMPs; and
- metering.

Where we have DWI support for enhancement schemes, we consider this approach offers sufficient customer protection and no PCD is required. The individual cases pertaining to improvements in raw water quality, cyber security and SEMD fall into this category. See SSC36 'Evidencing our enhancement expenditure in 2025 to 2030' for more detail.

### 6.2.3 Retail expenditure

Delivering a responsive, right first time approach to customer service is at the heart of everything we do. During AMP8 we will invest £77 million in our retail services to meet the expectations of our household and non-household customers and our stakeholders. Our focus is for the AMP is on delivering efficient transaction costs and reducing our bad debt levels. We discuss our retail plans in more detail in section 3.3 on page 48.

## 6.3 Performance commitments and targets

**In developing its outcomes framework for AMP8 and in common with the other water only companies, Ofwat has set us 15 performance commitments, some of which are measured separately by region. These have a strong focus on customer service, the environment and asset health performance, and measure the levels of service provided for a particular outcome. Ofwat has also set the service standards it expects to deliver through performance commitment levels (PCLs), which outcome delivery incentives (ODIs) are the rates on which it will base underperformance payments for companies that fall short of these service standards – and outperformance payments for exceeding them.**

Ofwat expects us to submit a business plan that will efficiently deliver a transformation in performance and meet the long-term requirements of customers, communities and the environment in line with our legal duties and societal obligations. This includes creating a clear link between efficient

cost allowances and the performance levels Ofwat expects us to deliver. The aim is to drive greater service improvements for customer and the environment by reducing the risk of PCLs being set too low or too high.

All our performance commitments will have financial underperformance payments attached and we cannot accrue outperformance payments for those that relate to statutory compliance measures, such as the CRI water quality measure. Ofwat expects the system of under- and outperformance payments to provide us with powerful incentives to focus our attention on performance, taking account of the value to customers of each aspect of our service. We have set our approach to outcomes for AMP8 within a long-term context. This means we can explore ways to deliver our performance commitments over multiple price control periods. In table 20 below, we set out our performance commitments and the stretching targets we have set ourselves. We have not included any bespoke performance commitments in our overall package.

**Table 20 Our performance commitments and targets**

| Theme | Performance commitment | Performance 2022/23 | Target performance 2029/30 |
|---|---|---|---|
| Customer service | C-MeX (score, rank in sector) | 8th | Upper quartile (UQ) |
| | D-MeX (score, rank in sector) | 7th | UQ |
| | BR-MeX (score, rank in sector) | n/a | UQ |
| Water supply and quality | Supply interruptions (mm:ss) | 03:15 | 02:30 |
| | CRI (score) | 1.47 | 0 |
| | Water quality contacts (per 1,000 of population) | 0.71[1] | 0.44 |
| Asset health | Mains repairs (per 1,000 km) | 150.7 | 113.4 |
| | Unplanned outage (%) | 3.72[1] | 2.53 |
| Environment | Biodiversity (Natural England biodiversity units per 100 $km^2$) | n/a[2] | 84.73 |
| | Operational GHG emissions (tonnes $C0_2e$) | 60,946 | 57,454 |
| | Leakage – Cambridge region (Ml/d, annual) | 13.4 | 10.6 |
| | Leakage – South Staffs region (Ml/d, annual) | 65.3 | 50.0 |
| | Household PCC – Cambridge region (l/p/d, annual) | 136.0 | 121.4 |
| | Household PCC – South Staffs region (l/p/d, annual) | 142.9 | 129.8 |
| | Non-h/hold consumption – Cambridge region (Ml/d, annual) | 25.2 | 28.8 |
| | Non-h/hold consumption – South Staffs region (Ml/d, annual) | 60.9 | 56.9 |
| | Discharge permits compliance (%) | 86.21 | 100 |
| | Serious pollution incidents (number) | 0 | 0 |

Note:

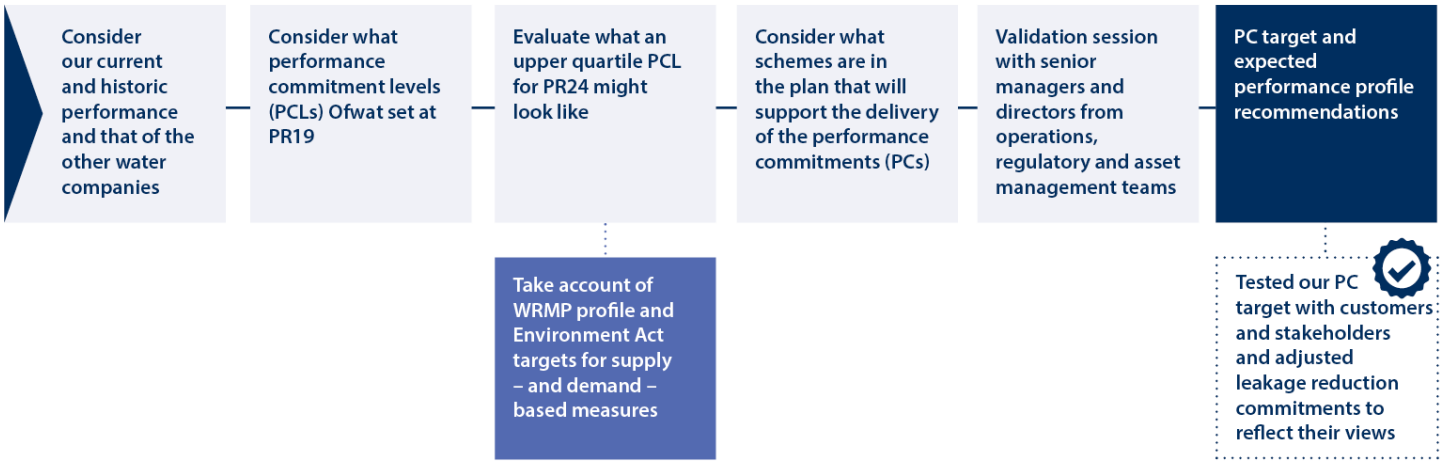
This table summarises our AMP8 performance commitments. For more detail on how we have set these, including our assumptions and additional calculations related to the PR24 performance commitment definitions, please refer to the data tables for outcomes (OUT1-10) and the associated outcomes data table commentary (SSC04a).

1. These are restated to the PR24 version of the definitions (2022/23 – 0.71; 2029/30 – 0.44).
2. This is a new way of measuring biodiversity for PR24 and is not directly comparable with the reporting approach we took at PR19.

We are delivering our performance commitments through a combination of base and enhancement expenditure. Please refer to the additional detail in SSC04a 'Data tables commentary – outcomes' and in our LTDS for information on the extent of delivery from base and enhancement funding.

For each performance commitment, we have set targets that are stretching and deliverable with the levels of expenditure we propose in this business plan. The process we have followed is set out in figure 20 below.

**Figure 20 Setting stretching but achievable performance commitments**




We are aiming to achieve at least upper quartile in the water sector for all our performance commitments, where appropriate. But there are some where we want to go beyond this, aiming at frontier or sector-leading performance. For example, our current supply interruptions performance (03:15 minutes:seconds) is already at the forefront of water company performance. But we want to go further in AMP8, delivering a target of 02:30 by 2029/30. We will deliver this target through day-to-day process improvements following the progress we have made in this area already during the current AMP. In addition, we think the investment we are making to ensure the resilience of our assets will help to prevent significant events over the long term.

We also want to go beyond upper quartile and achieve sector frontier level for the number of contacts we receive from customers about the taste, colour and smell of the water they receive from us, with a target of 0.44 contacts per thousand of population by 2029/30. Our performance in 2022/2023 of 0.71 (rebased) contacts per thousand of population is the result of significant improvements and investment made in the first two years of the current AMP. We expect to improve on this performance further with the completion of the upgrade programme at Hampton Loade and the associated trunk mains cleaning programme.

For leakage, we want to demonstrate leadership in the water sector by going faster than the Environment Agency's target and our required path to delivering Water UK's PIC target. So, we will deliver leakage reductions of 20% in our Cambridge region during AMP8 and 15% in our South Staffs region (our targets for the current AMP are 14% and 15%, respectively). Our plans in this area are supported by customers and have been informed by Artesia's work on the optioneering of best value solutions. There is more detail on this in section 3.2 of SSC36 'Evidencing our enhancement expenditure in 2025 to 2030'.

We recognise that meeting some of our AMP8 performance commitment targets will be more challenging than others.

We consider our AMP8 totex programme will be sufficient to enable us to target upper quartile across our whole package of performance commitments. Key to us achieving this is our ability to manage the volatility risk, because where we fail performance commitments, the risk is that we fail significantly rather than by a small amount. This is because volatile events tend to have larger or sustained impacts and be far less within management control – for example, a compliance failure at Hampton Loade, a trunk mains burst leading to supply interruptions or poor weather conditions in the winter).

We have carried out a Monte Carlo analysis to model the probability of different outcomes in a process that cannot easily be predicted because of the intervention of random variables. We have used this technique to help us understand the impact of risk and uncertainty across a range of scenarios. Monte Carlo uses a sampling approach to select a range of outcomes for each PC and averages the results across the whole package. This is achieved by fitting a probability curve to each PC, based on an assessment of its P10, P50 and P90 performance levels. This analysis shows that the combination of very stretching performance commitments and the ODI rates that Ofwat has proposed, which are typically two to four times higher than in AMP7, means there is a significant negative skew to the incentive package. This is well outside the expected range of +/-2% in Ofwat's methodology. Please see SSC20 'Outcome delivery incentives risk range' for more information on this analysis.

## 6.4 Delivering a high-quality and ambitious business plan

**In this section, we describe our deliverability strategy for the base and enhancement capital programmes and the IRE programme that form the investment plan for our Cambridge and South Staffs regions during AMP8. We also detail our approach to establishing a supply chain with the required capabilities and capacity to enable us to deliver our ambitious business plan. Additional information on deliverability can be found in SSC36 'Evidencing our enhancement expenditure in 2025 to 2030'.**

We are satisfied that the supply chain risk is manageable and that our delivery plans account for:

- our ability, and that of our supply chain, to expand our capacity and capability at the rate required the deliver the increased investment;
- the impact of similar levels of growth across the water sector and any overall sector/supply chain capacity constraints; and
- key supply chain risks and capacity constraints, such as the availability of specialist resource or components.

The net wholesale capital and IRE programmes for PR19 were set at £219 million and £76 million, respectively (in 2022/23 prices). This compares with our AMP8 programme, with net wholesale and IRE programmes set at £290 million and £84 million, respectively (in 2022/23 prices). Although the AMP8 programme is greater, the magnitude of investment over AMP7 and AMP8 is broadly similar.

Our AMP7 capital investment programme has been dominated by two major water quality projects to deliver an additional secondary treatment process at Hampton Loade and Seedy Mill. These projects are forecast to have a combined outturn cost of close to £100 million. This is significantly larger than anything we have delivered in the past 30 years. The upgraded treatment processes at Seedy Mill was brought in commission in March 2023, in line with the target date agreed with the DWI, and we are on target to complete the work at Hampton Loade by March 2025. At the time of writing, we are making good progress towards the delivery of the remainder of our AMP7 capital investment programme, with around 80% of the spend completed, committed or already in progress.

In comparison, the three major projects in AMP8 – the Barr Beacon and Langley service reservoir rebuilds and the transfer from Anglian Water's Grafham Water reservoir – have a combined cost of £48million (£36 million for the reservoir rebuilds and £12.4 million for the Grafham transfer). We also have worked hard with all our regulators and stakeholders to develop Fens reservoir, at this stage there is no effective regulation for a company of our size to bring such a large investment to fruition – our AMP8 forecast costs are £150 million, which is just to take the scheme to market for an investment provider to then design and build.

When compared with AMP7, our AMP8 programme has shifted in focus from larger-scale treatment works-based water quality enhancements to smaller network and abstraction site resilience and water quality improvements. In addition, our metering programme has increased considerably from £12 million in AMP7 to around £37 million in AMP8. The other noteworthy area of investment covers our WINEP obligations, which will rise from £8 million in AMP7 to £19 million in AMP8. Much of the focus of this work is on carrying out environmental improvements at the chalk stream habitats in our Cambridge region. Other new areas of investment include:

- smart networks technology;
- net zero carbon delivery; and
- energy projects, such as renewables and electric vehicle infrastructure.

We think our capital investment programme is proportionate to our size, but acknowledge that it is much smaller in scale when compared with some of the other companies in the water sector. So, our approach to deliverability and the supply chain must be considered within this context. This means that, taken in isolation, our investment programme is unlikely to bring stresses to bear on the supply chain itself. But we remain aware of the general increase in scale of other water companies' AMP8 investment programmes as a whole, which is primarily being driven by legally mandated wastewater improvements. One potential area of stress identified in our programmes supply chain is smart metering. We discuss this further in section 6.4.3 below.

Underpinning our deliverability conclusions are the assumptions we have made around a number of micro-issues, such as the scale of internal resources required to manage our investment programme and the appointment of an appropriately experienced and competent supply chain with the capacity to deliver on time and to the scale required. We recognise that we can only mitigate macro-issues to a degree – events such as the impact of the COVID-19 pandemic and the water in Ukraine, for example, have affected the cost of specific commodities like steel, which soared in prince in 2022. The continuation of these or the occurrence of other similar issues in AMP8 may impact deliverability. In section 6.4.4 we outline the tactical approaches taken to mitigate the macro-economic shocks seen in 2021 and 2022, and how we intend to make further use of these throughout AMP8. We will continue to manage these macro-level risks within our company risk register, which is overseen by our Audit and Risk Committee.

## 6.4.1 Our AMP8 investment programme

As detailed in sections 6.2.1 and 6.2.2 above, our AMP8 investment programme comprises a number of base and enhancement schemes. We have costed our base capital programme at £150 million, our IRE programme at £84 million net and our enhancement capital programme at £140 million. These are summarised in tables 21 and 22 below, with the AMP7 expenditure for comparison. For more information, see SSC36 'Evidencing our enhancement expenditure in 2025 to 2030' and SSC37 'Our asset management approach to best-value investment planning through 2025 to 2030 and beyond'.

**Table 21 Example of AMP8 base projects, compared with equivalent AMP7 costs**

| Planned base capital programmes + IRE | AMP7 | AMP8 | Key projects |
|---|---|---|---|
| Reservoirs | £12 million | £39 million | Barr Beacon no. 1 reservoir rebuild and upsize<br>Langley reservoir rebuild (with costs split between base and enhancement)<br>Uplift in base maintenance around service reservoirs and surface reservoir assets |
| Production (including water treatment works) | £21 million | £37 million | Essential site maintenance based on site risk capture process and prioritisation |
| Leakage | £8 million | £8 million | WRMP identified leakage activity to achieve a 20% reduction in our Cambridge region and a 15% in our South Staffs region during AMP8 |
| Network infrastructure maintenance | £22 million | £14 million | Network logging<br>Large network metering<br>Strategic control valve schemes |
| Fleet and facilities | £4 million | £10 million | Fleet investment, including electric vehicles<br>Facilities maintenance programme |
| Business systems | £3.5 million | £5 million | Key business systems investment, including IT/OT and operational systems |
| Infrastructure renewals (IRE) | £76 million (net) | £84 million (net) | Small and large mains renewals, pipe bridge maintenance and cathodic protection |

**Table 22 Example of AMP8 enhancement projects, compared with equivalent AMP7 costs**

| Planned enhancement capital programmes + IRE | AMP7 | AMP8 | Key projects |
|---|---|---|---|
| Supply/demand balance in our Cambridge region | £9 million | £12.4 million | Grafham transfer – network development required for a new connection to Anglian Water's network to enable a bulk supply from Grafham Water into our Cambridge region |
| Water efficiency | £3 million | £4.7 million | Community water efficiency/water neutrality schemes (including working with housing developers to build more water efficient homes) |
| WINEP | £7.6 million | £19.9 million | Chalk stream restoration programme<br>Eel screens at Chelmarsh reservoir |
| WRMP metering programme | £12.4 million | £36.3 million | Household and non-household universal smart metering, with associated reductions in PCC |
| Water quality and production resilience | £85 million[1] | £42.6 million | Antimony removal scheme<br>UV treatment at six sites<br>Nitrate removal scheme<br>Manganese removal scheme<br>Langley reservoir rebuild (with costs split between enhancement and base)<br>New generators and two new boreholes in our Cambridge region to build more resilience into the network<br>Enhancement schemes at Seedy Mill |
| Carbon and energy | £0 million | £7.2 million | Insetting/offsetting<br>Investment in renewables |
| Smart operations | £0 million | £3.6 million | Smart water system trail – prioritisation of the Outwoods water supply zone (A38) and other identified areas to reduce system volatility |

| Planned enhancement capital programmes + IRE | AMP7 | AMP8 | Key projects |
|---|---|---|---|
| Security SEMD | £0 million | £0.5 million | Security upgrades as part of SEMD measures at various sites |
| Leakage | £0 million | £1.2 million | Leakage reductions above and beyond our WRMPs |
| Cyber security | £0 million | £2.8 million | Alignment with Network and Information Systems Directive and Cyber Assessment Framework |
| Infrastructure resilience | £3.5 million | £8.3 million | Hanbury and Burntwood resilience-driven mains laying<br>Langley reservoir rebuild (with costs split between base and enhancement) |

Note:

1. Includes Hampton Loade and Seedy Mill upgrades and associated trunk mains cleaning programme.

We have phased the delivery of our investment programme to achieve the following objectives.

- A relatively flat profile on financial, internal and external resource demand to avoid inefficiencies in peaks and troughs (although we accept some of these programmes will naturally accelerate in the first year of AMP8 and decelerate in the final year of the AMP to a certain degree).
- Front loading of investments and projects with regulatory drivers.
- Front loading of investments and projects that we consider will have the most beneficial impact on operational risk and customer outcomes.
- Front loading of investments and projects early in AMP8 that are considered complex and that have a higher risk profile.

## 6.4.2 Delivery strategy, context and market conditions

We think the AMP8 supply chain will broadly reflect the AMP7 supply chain in those areas of investment that are common between the two AMPs. Where we know that there are key material differences in our AMP8 programme, we have proactively engaged with our supply chain to ensure we have all the appropriate contractual needs in place, We have also committed to using the final year of the current AMP (2024/25) to increase metering deliver so that we can hit the ground running in AMP8.

Traditionally across the water sector, capital investment programmes are managed by a number of in-house functions, but delivered through an external supply chain of consultants and contractors operating under framework agreements and carrying out planning, design and build functions. Our supply chain, managed by in-house teams across the business, is responsible for an optimised programme defined by our Asset Management team and managed by our Capital Investment Delivery function. We have applied this model to deliver our AMP7 investment programme and will continue with this approach in AMP8, albeit with some tactical changes to ensure the model can deal with current market conditions and the differing focus of the programme from AMP7 to AMP8, as described above.

For our AMP7 investment programme, we established a number of multi-supplier framework agreements and stand-alone contacts. Some of these frameworks are currently undergoing a re-tender process. This is to either improve best value or to adapt the contract to changing market conditions to improve deliverability. Using existing mechanisms within the AMP7 contracts, and by mutual agreement, a number of them will be extended by at least one year into AMP8. We will do this on an 'as required' basis for reasons of expediency to accelerate early AMP8 project delivery or, in the case of stand-alone contracts or projects carrying over for completion to AMP8, to ensure they continue to be in place until the projects are complete. These contracts will then be superseded by newly-tendered frameworks.

To support these contracting delivery frameworks, we also use a number of framework supply agreements for components and materials that are used in different schemes within our investment programme. This includes, for example:

- metering replacements and smart upgrades;
- infrastructure renewals;
- repairs and maintenance; and
- infrastructure network instrumentation.

Conditions in supply chain markets saw a long period of stability in the ten or so years leading up to 2020. Then, the combination of the UK leaving the European Union, the COVID-19 pandemic and the war in Ukraine in 2022 had a significant impact on supply chains for certain costs and the availability of some materials, components and resources. Construction resource availability in our South Staffs region has also been impacted by the HS2 high-speed rail project. At the time of writing, supply chains are stabilising and are expected to continue to do so. Significant shocks to certain materials and components, such as steel (which doubled in price between 2020 and 2022) and the availability of silicon microchips that are used for industrial controls, have eased during 2023 and are expected to normalise as we approach the start of AMP8.

These shocks were also driven or exacerbated by high energy prices and the steep rises in general inflation over the past couple of years. The expectation is that the significant spikes in UK inflation – with CPI reaching 9% and RPI peaking at more than 10% in 2022 – will continue to stabilise and reduce during AMP8 to or close to the Bank of England target of 2% by 2030. In 'Business net zero: Making progress in a changing economy' published in January 2023, energy market intelligence analysts Cornwall Insight said its expectations were that wholesale energy prices would continue at elevated levels until at least 2025 before stabilising and reducing. It is unlikely, however, that costs will return to pre-pandemic levels.

The general expectation is that market stability will improve into and during AMP8, but that the residual impact of recent macroeconomic shocks, such as those outlined above, will continue to be felt to some degree. This means they will require continued mitigation and consideration to ensure our investment programme is delivered. As such, we intend to build into our AMP8 plans the measures we took in 2021 and 2022 to mitigate the immediate risks presented to the delivery of our AMP7 plans. We outline our strategic approach below.

**Securing your water future – delivering our PR19 capital programme efficiently: the Seedy Mill long-term plan**

At PR19, we sought funding to significantly upgrade the two largest water treatment works in our South Staffs region. One of the works, Seedy Mill provides a significant proportion of the water supplied across the region, with a peak supply capacity of 105 Ml/d and a future potential capacity of up to 120 Ml/d. While we were successful with our bid to install second-stage filtration at the site, Ofwat challenged the ability of a company our size to deliver this level of investment. At PR19, the solution was costed at £30 million (2017/18 prices).

We awarded the contract for the project to NMCN and work started at the site in July 2020. Our target date of 31 March 2023 was realistic, but demanding – in line with the commitment in our business plan for 2020 to 2025 to set and deliver ambitious and stretching performance commitments. In October 2021 NMCN went into administration, at which point all work on the site stopped and the future of the project became more uncertain. We explored a number of options and following discussions one of our framework contractors, the contract was novated to Galliford Try and work started again in December 2021. The initial delay and the change of contractor added considerable risk to the programme. During the first half of 2022, the construction programme and key dates presented us and Galliford Try with a number of challenges – not least, a forecast commissioning date three months later than the target date we agreed with the DWI.

We carried out significant work with the supply chain, internal stakeholders and the Galliford Try project team to bring the project back in line with our target date. We adapted the programme, which enabled us to make on-site delivery improvements and secure additional efficiencies. We also optimised the commissioning programme to bring the date back into line with our regulatory commitments, but with some contingency to allow for any delays. The project also saw significant challenge as a result of the global materials and components shortages and price changes. For example, the COVID-19 pandemic, the war in Ukraine and the inflationary pressures caused by the surge in energy prices all presented particular problems. This was exacerbated by the regulatory changes to red diesel use in construction, a supply/demand imbalance for key materials, including concrete, as a result of the HS2 high-speed rail link project, and the lack of availability of components for industrial control systems caused by a world-wide microchip shortage. We made use of tactical and agile procurement approaches to mitigate these challenges and keep the project on track.

The new filtration plant was commissioned into service on 21 March 2023 – ten days ahead of our regulatory deadline. In addition, our final costs for the project are expected to be just over £30 million in current prices, against our target of £30 million at 2017/18 prices. This is a considerable achievement given the inflationary pressures we have seen over the past couple of years and is testament to effective project management and collaborative working between ourselves, our construction delivery partner and our supply chain.

## 6.4.3 Supply chain preparations for AMP8

In 2022 we started the process to review the need for our AMP8 investment programme and assess market conditions in the context of the delivery challenges facing the water sector in the current AMP and those envisaged for the five years from 2025 to 2030. We have implemented a number of developments to improve the maturity, effectiveness and efficiency of the asset management and capital delivery functions within our business. These include the following.

- Implementation of the **Copperleaf H2O** ISO 55000 aligned asset management and long-term investment planning tool.
- Development of **programme management and asset risk capture processes**.
- Development of a **project management office and governance functions** to improve programme controls, performance monitoring against cost and time milestones, and programme assurance.
- Development of an **updated project delivery scheme process** to provide the consistency of a lean delivery approach.

We have aligned our in-house delivery teams to the resource demand of AMP8, with the opportunity to supplement key roles in project management, commercial, engineering and other specialisms – for example, in the area of hydrology – through our professional services framework contract. We have reviewed all our framework contracts and, as discussed above, have either tendered for and appointed – or are in the process of tendering for and appointing – updated framework agreements to deliver our AMP8 programme. The process we have carried out complies with the Utilities Contract Regulations 2016.

**Securing your water future – developing strong partnerships with our supply chain**

One of our key stakeholders is British Water, which represents the interests of the water sector supply chain. Each year, it publishes a company performance survey, giving supply chain organisations the chance to feedback on water company performance over the previous year in 11 categories, including innovation, contractual approach and communication. In the most recent survey, published in September 2023, we performed very strongly in the water only company category in a number of areas – in particular, in terms of our contractual approach, our professional qualities, our technical competency and our ability to manage the transition between planning periods effectively. This is testament to the importance we place on maintaining healthy and productive relationships with our supply chain partners to deliver our ambitious plans in AMP8 and beyond.

Our AMP8 framework agreements will use the Institution of Civil Engineers NEC4 suite of contracts, specifically the Professional Services Contract and the ECC, with the following options.

- Option A – priced activity schedule.
- Option B – priced BoQ.
- Option C – target cost.
- Option E – for emergency works only cost reimbursable.

We have chosen the NEC suite of contracts because it is the prevailing contract form used across the utilities sector in the UK. It has been developed to provide flexibility, encourage good project management, and be clear and concise. It also provides a balanced client contractor/consultant relationship. Each framework comprises a number of 'lots', for which successful delivery partners can be appointed to service one or multiple lots.

We will deliver the core of our programme through the following four framework contracts. If required, we may also consider sourcing stand-alone contacts for complex single projects with high capex where we consider the existing frameworks will not provide best value or the delivery requires a bespoke contract structure.

- Infrastructure Asset Delivery Framework – New Build, Improvements, Renewals, Refurbishments, and Capital Maintenance (£20 million to £25 million a year).
- Non-Infrastructure Assets Delivery Framework –New Build, Improvements, Renewals, Refurbishments, and Capital Maintenance (£30 million to £35 million a year).
- Reservoir Inspection, Maintenance and Refurbishment – Service reservoir regulatory inspections and associated delivery works (£1 million to £1.5 million a year).
- Professional Services Delivery Framework – Technical Engineering Design, Specialist Modelling and Analytics, Commercial and Regulatory Advisory (£2 million to £3 million a year).

Typically in AMP7, each of these contracts had two appointed delivery partners. Our intention for AMP8 is to broaden the scope of these frameworks to capture a higher proportion of the AMP8 investment programme and increase the number of delivery partners to at least three on each contract. This will ensure strength and depth within the supply chain. It will also increase the options for delivery. We recognise that this could dilute the value proposition for the appointed contractors. So, to ensure the contracts remain attractive to supply, we will place all contracts through frameworks wherever possible. This is different to our current approach, where a number of major capital projects have been placed using stand-alone contracts.

Capital project works will be let on either a mini tender competition basis or through direct allocation, with independent cost valuation to ensure value for money.

Our AMP8 approach has been designed to:

- deliver value for money;
- minimise internal 'cost to serve';
- ensure resilient and reliable delivery;
- provide flexibility and adaptability;
- encourage innovation; and
- secure supplies of potentially scarce components and resources.

The tender process and assessment will focus on the provision of best value, rather than lowest cost. As a result, it will consider potential supply chain partners on the basis of:

- health and safety management;
- appropriate experience and performance;
- environmental management;
- innovation;
- the pricing of a 'notional project'; and
- the bill of rates.

On the basis of the lessons learned during the current AMP, our assessment will also include a particular focus on identifying contractors to integrate into the supply chain that can demonstrate the following.

- Vertical supply chain integration. Our recent experience has been positive, where contractors have Group companies that have asset management capability – for example, motor control centres or chemical dosing rigs. This mitigates supplier risk, with meaning we have less reliance on suppliers with no direct or indirect Group company contractual relationship with the client. It also allows for off-site manufacture, enabling a higher-quality product assembled in a factory environment. An example of this is the current programme to install ceramic membrane-based filtration units at Hampton Loade, which is contracted to Ross-Shire Engineering (RSE). RSE has in-

house design capability and in-group capability to manufacture the bulk of the steel components, machine control centres and chemical dosing units being used in this project. As such, it has a much greater control of supply and delivery to serve the construction programme.

- Complementary capabilities. We will seek to engage with delivery partners that have complementary capabilities and experience, so that the overall supply chain can take an 'alliance' style approach to the delivery of the overall investment programme.

- Common geographical presence. Given the scale of our investment programme, it is unlikely that contractors and suppliers will seek to establish a regional presence on the basis of our needs alone. So, it will be important for us to seek delivery partners with an established or 'soon to be established' presence within our Cambridge and South Staffs regions.

- Financial resilience. We consider the financial failure of a delivery partner a key risk with significant implications for additional costs and delays in delivery. We will consider evidence of financial stability to be a key requirement for all supply chain partners.

We will supplement the capital delivery framework contracts with a number of direct framework procurement contracts and approved suppliers. This will enable us to procure specialist services, including:

- leakage detection and components;
- customer meters;
- infrastructure instrumentation; and
- sensors.

**Securing your water future – ensuring the capacity to deliver our universal metering programme**

A key programme for us to deliver in AMP8 and AMP9 is our universal metering strategy. The provision of meters is considered a particular stress point in the supply chain during AMP8, given the nature of the components and the ramping up of smart metering installation programmes across the water sector. Our programme will see us increase the number of meter installations (new and replacement) across both regions from around 18,000 a year in the current AMP to around 43,000 a year in AMP8 – a level that we expect to see replicated across other water companies.

We currently have a supply contract with a vertically integrated supplier with manufacturing plants in Europe. This contract, which has performed well during the current AMP, has an option to extend to the end of AMP8. We have reviewed metering technology within the context of our universal metering strategy and have confirmed that our current supplier's product will continue to meet our needs to at least 2030. In addition, the supplier has confirmed that, with an appropriate notice period, it can commit to meeting the increase in production and supply through an exclusive long-term contract. We have carried out a review of alternative suppliers and have concluded that there is limited scope to secure better value by going out to the market at this point. So, we intend to extend the contract with our current supplier to ensure continuity and resilience of supply.

## 6.4.4 Strengthening our procurement processes in AMP8

As we have discussed above, we are aware that parts of the supply chain may be subject to particular stress, either from the general market conditions created by significant investment in UK infrastructure over the next ten years or so, or through specific stresses created by water sector priorities for AMP8. An example of the former would be the scarcity of construction labour, which is likely to be a particular pressure point in our South Staffs region as a result of the HS2 high-speed rail link; an example of the latter would be the availability of smart meters and investment in intelligent infrastructure components for our smart networks programme.

So, we have implemented a number of tactical changes to our procurement processes, which we will continue and develop in AMP8. These include:

- carrying out assurance each year on the financial stability and capabilities of our framework delivery partners and all approved suppliers, and also quarterly financial checks on all critical suppliers – for example, those that supply chemicals and other key components;
- carrying out performance monitoring to ensure stronger relationships with client-focused, high-performing suppliers and contractors, and early improvement plans or disengagement from those that perform poorly;
- ensuring early contractor and supplier engagement with regard to complex projects and programmes;
- carrying out risk and value engineering exercises to ensure projects are scoped appropriately to acceptable levels of operational risk and provide value for money;
- making more use of Option A (fixed-price contracts) versus Option C and E contracts to give us more certainty about costs;
- implementing a CEMAR contract management system to improve the efficiency and transparency of our contract administration;
- using project batching to provide more certainty of our order book to enable contractors to achieve economies of scale;
- moving away from using 'just in time' delivery to a 'procure early to secure' approach for materials and components. We are adopting this approach both for contracted projects and directly procured materials and components;
- implementing a process for the early identification and pre-approval of alternate suppliers for components and key work streams to mitigate risk in the supply chain; and
- encouraging solutions that deploy a 'cookie cutter' approach to off-site fabrication to minimise on-site preliminary and indirect costs.

We are also strengthening our supply chain relationships with entities that can demonstrate an ability to source alternate components and materials from a number of manufacturers.

An example of the 'procure early to secure' approach that we have already taken relates to our Hampton Loade upgrade programme. Steel components have been procured, prepared and laid down in depots and storage areas well in advance of being required for construction. This has mitigated the supply chain risk to the programme. Similarly, an example of where we have secured alternate components to ensure outcome delivery is our Seedy Mill upgrade programme. During construction, a risk emerged with supplier reliability for pre-ordered input/output cards for the control systems. Components from an alternative supplier were ordered in parallel to mitigate this risk. The risk materialised and the pre-ordered components were initially delayed. Once they were delivered and installed, we were able to complete the upgrade programme, which was delivered in line with our target deadline.

We have our own on-site Stores team and storage facilities, which means we can maintain a stockpile of things like meters, components and instruments to deploy for various programmes and work schemes. We will seek to build up strategic stores of items that could be subject to supply chain shocks to ensure we can deliver to deliver projects and programmes in the event of disruption to supplies. We will review our Stores policy for AMP8, at the core of which will be a plan to identify the critical items required on an ongoing basis to ensure continued delivery – in particular, for items where supply options are limited or supply chains are deemed 'high risk', primarily because they have to be imported from abroad. We will prescribe and maintain minimum stock levels to mitigate operational and programme risk.

We will continue to invest in new technology as part of our smart networks programme. This will enable us to:

- monitor performance effectively;
- manage our network more efficiently;
- predict the need for interventions before customers are impacted; and
- maintain service to customers at all times.

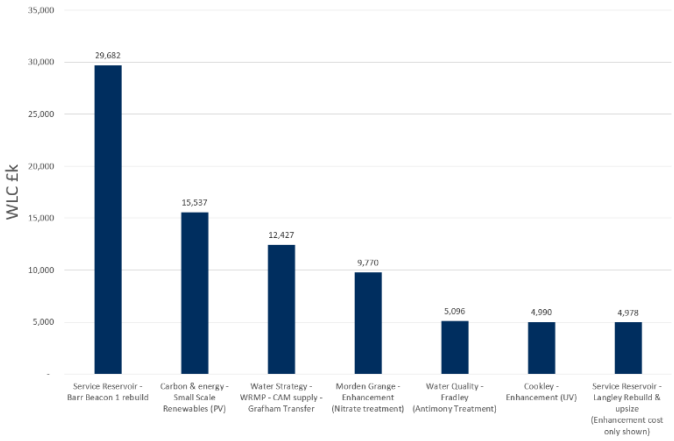
Our contract for the supply of data loggers, sensors and instrumentation is already in place, with an end date of March 2029. The contract includes six suppliers on a framework to ensure the supply both of new data loggers and parts for historically fitted equipment. We are also exploring opportunities in the Water Only Company Procurement Forum and other cross-sector groups to build mutual support in this critical area and to enable efficiency to be maintained in the supply chain now and over the long term.

## 6.4.5 Direct procurement for customers

As part of the PR19 price review process, Ofwat introduced direct procurement for customers (DPC). This involves water companies competitively tendering for service in relation to the delivery of large infrastructure projects, resulting in the selection of a third-party competitively appointed provider. DPC enables water companies to competitively procure more aspects of large infrastructure projects, including financing.

We recognise the merits that direct procurement can bring, especially for the potential efficiency benefits it can deliver for customers – for example, for large projects that cross company boundaries. We have reviewed our totex programme (both base and enhancement expenditure). Outside of the Fens reservoir scheme, which we discuss elsewhere in this document and in more detail in SSC03 'Fens reservoir – our approach into AMP8', there are no schemes that we consider would benefit from DPC. There are also no schemes that come close to the automatic whole life costs greater than the £200 million threshold. We illustrate this in figure 21 below.

**Figure 21 Whole life costs of our principal high cost schemes**




We remain supportive of this initiative and will always look for the right delivery routes for infrastructure schemes that deliver the best value for our customers.

# 7. Identifying risk and delivering appropriate returns

## Water companies need to maintain an appropriate level of financial headroom to manage short-term shocks and ensure they are financeable and can continue to deliver for customers while keeping the sector attractive to investors.

To achieve this, there needs to be an appropriate balance of risk and reward between companies and customers. This requires a symmetrical package of ODIs and an appropriate cost of capital to ensure the UK water sector remains investable at a time when it faces a step change in expenditure to fund new commitments.

**Securing your water future – our approach to risk and return at a glance**

- We have used our 'natural' PAYG rate based on the proportion of opex and capex in our business plan.
- We have used a RCV run-off rate of 4.5%, in line with Ofwat's guidance on the upper limit.
- We have used a WACC of 3.69% which includes a Company Specific Adjustment to the cost of embedded debt of 55bps and an updated view of the industry WACC, applying the latest market data to Ofwat's PR24 final methodology. In addition, we consider some of Ofwat's decisions in its methodology that inform the CAPM range and the cost of debt model are worth revisiting in the light of further evidence.
- We have assessed the financeability of the notional company and the Board can confirm that the Company is financeable from both a debt and equity perspective.
- We have assessed the financial resilience of the Company under its actual structure using actual ratings guidance and definitions given to WoCs. This indicates that that credit metrics are consistent with an investment grade, albeit marginally below the target rating of Baa1/BBB+ in some years of the 2025-30 period.
- We have stress tested our actual structure using Ofwat's prescribed scenarios. Under most scenarios credit metrics fall to a level consistent with a weaker Baa2/BBB rating. In the case of the totex scenario, metrics are significantly impacted such that credit quality is likely to be impacted.
- The Board has discussed with the shareholders actions that could be taken in these circumstances in order to make the business more robust for the longer term. These have included restricting dividends and further equity injections.
- As an illustration, we have modelled an equity injection of £35 million. Such an injection would improve credit metrics such that they are consistent with a Baa1 rating on most scenarios. On this basis, the Board considers that the business would be financeable from a debt perspective and would have an improved ability to absorb shocks.
- Since their acquisition of the business in 2018 our shareholders have invested £40 million in two separate tranches: £15 million in 2019 and £25 million in 2022.
- Our shareholders would be supportive of injecting fresh equity. However, doing so is not easy. There are a wide range of factors at play, not least the perception of the investability of the UK water sector relative to the alternatives in the global market and, most importantly, the outcome of Ofwat's determination of this business plan. As such, we propose to further consider this option further once the outcome of Ofwat's determination of our plans is known.

## 7.1 Cost recovery

### 7.1.1 PAYG rates

We have calculated our PAYG rates in direct proportion to our planned opex and capex expenditure. We expense all of our IRE and so this is already included in our overall opex projections. The PAYG rates we are proposing are set out in tables 23 and 24 below.

**Table 23 PAYG rates – Water Resources**

| | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | Total |
|---|---|---|---|---|---|---|
| Capex (£m) | 1.470 | 8.567 | 10.546 | 6.934 | 4.106 | 31.624 |
| Opex (£m) | 12.358 | 12.219 | 11.827 | 11.624 | 11.501 | 59.529 |
| PAYG rate | 89.37% | 58.78% | 52.86% | 62.63% | 73.69% | 65.31% |

**Table 24 PAYG rates – Network Plus**

| | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | Total |
|---|---|---|---|---|---|---|
| Capex (£m) | 48.425 | 50.683 | 57.508 | 61.070 | 38.917 | 256.603 |
| Opex (£m) | 79.753 | 79.885 | 78.996 | 77.940 | 77.062 | 393.637 |
| PAYG rate | 62.22% | 61.18% | 57.87% | 56.07% | 66.44% | 60.54% |

The PAYG rate varies between years as result of the phasing of our capital programme, with operating costs remaining relatively consistent between years.

## 7.1.2 RCV run-off rates

At PR19 and previous price reviews, our approach to setting the RCV run-off has been based on the 'natural rate' or 'current cost depreciation'. This required estimating the Modern Equivalent Asset Value (MEAV) of our assets and estimating the remaining useful life.

At PR19 we updated our approach from PR14 rather than undertaking a complete asset revaluation. This resulted in an RCV run-off rate of 6.4% for the Network Plus price control and 9.7% for the Water Resources price control.

For PR24, Ofwat has set out a framework to determine the appropriate run-off rate for companies and the following sections set out our considerations for these factors.

### 7.1.2.1 Intertemporal fairness

Setting an RCV run-off rate that is either too high or too low impacts on whether current or future customers are paying their fair share of capital investment. Therefore, the asset life of assets is an important consideration so that bills are linked to how the asset is consumed.

Ofwat uses a starting point of average remaining lives from 2021/22 published accounts. For us, this shows an average asset life of 29.6 years for water resources and 24.1 years for network plus. This equates to a run-off rate of 3.38% and 4.14%.

The main advantage of Ofwat's approach is that it is a simple, transparent and consistent way of determining asset lives across the water sector. But, because of its simplicity, there are some drawbacks to the approach, which we describe below.

- Fully depreciated assets. There may be assets still in operation that are fully depreciated, but that still require expenditure to maintain. This can create a gap between expenditure required and revenue that would be generated under this approach without any adjustment.

- Inflation and long-lived assets. The water sector has, on average, long-lived assets. Historical costs do not capture the changing costs of maintaining or replacing these assets. Over extended time periods these changes can be large. A measure based on historical costs may not provide a meaningful reference point for AMP8 expenditure.

- RCV size. We have a relatively small RCV compared to the size of our operations – for example, the length of mains of the number of properties we serve. This is illustrated in table X below, where we are 15th out of 17 companies with only Portsmouth Water and Hafren Dyfrdwy below us. Given that the RCV is relatively small, a given amount of depreciation in £m (based on CCD data or on expenditure needs) translates into a higher run-off rate on the RCV as set out below.

| | RCV/km | RCV/ property |
|---|---|---|
| South Staffordshire Water | 49.3 | 570.5 |
| Water sector | 95.0 | 1,239.9 |
| South Staffordshire Water rank | 15th | 15th |

  As the table shows, our RCV is roughly 50% of the average for the water sector per km or per property. At PR19, there were five companies with an allowed a run-off rate of 5.5% or higher for Network Plus. Of these, four have a relatively low RCV per km or property: Bristol (ranked 14th), SES (12th on per property basis), Hafren (17th) and South Staffordshire Water (14th).

- Relationship between book value and RCV. Ofwat's method generates a percentage point output. This is then applied directly to the RCV. However, the relationship between net book value from the historical cost accounts and RCV can vary significantly by water company.

- Regulatory divergence from PR19. This measure of RCV run-off has no correlation with the run-off rates used at PR19.

In order to understand the impact of the first two of these points, we have performed a cross-check by updating our PR19 approach to calculate a current cost depreciation. We have not sought to perform a new revaluation of our asset base, which would be time consuming and expensive. So, we have uplifted our previous revaluations by CPIH inflation each year, removing fully depreciated assets and adding on new investment for each year. This results in the estimated run-off rates set out in table 25 below.

**Table 25 Natural RCV run-off rates – wholesale**

| | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | Total |
|---|---|---|---|---|---|---|
| RCV run-off rate | 5.6% | 5.3% | 4.9% | 4.8% | 4.9% | 5.1% |

Our natural run-off rate of 5.1% is above that implied by Ofwat's remaining asset lives approach of 3.38% and 4.14% for Water Resources and Network Plus, respectively.

#### 7.1.2.2 Affordability

We have considered our RCV run-off rate in the context of affordability for customers while also recognising that we need to be fair between current and future customers. Our acceptability testing with customers incorporates our proposed run-off rate.

#### 7.1.2.3 Guidance on acceptable upper limits

Ofwat's upper limit on RCV run-off of 4.5% is significantly below our PR19 run-off rates of 6.4% for Network Plus and 9.7% for Water Resources. So, aligning to this threshold represents a sizeable reduction for us.

Considering our own analysis of the natural run-off rate of 5.1%, we consider there is justification for a rate above Ofwat's upper limit. However, having considered our plan in the round, we have aligned to Ofwat's upper limit of 4.5%, which we think is in the interest of customers to keep bills lower by around £4.

#### 7.1.2.4 Financeability

The RCV run-off rate has a significant impact on our FFO/Net Debt metric used to assess company credit ratings by S&P. Each 1% reduction in the run-off rate impacts the metric by around 0.7%. We have considered this in our financeability and financial resilience assessment in sections 7.3 and 7.4 below.

## 7.2 Return on capital allowance

**Following Ofwat's guidance, we have prepared our business plan on the basis of the 'early view' return on capital (WACC) set out in the final methodology for PR24, updated with recent market data. We think that the significant changes in market rates since September 2022 justify the divergence from the 'early view' estimates and ensure we check the financeability of our business plan under current market conditions and going forward.**

We also present evidence to support a 0.55% CSA on the cost of embedded debt – that is, to support a higher estimate than 0.30% presented in the final methodology. A combination of Ofwat's 'early view' return on capital, updated with recent market data, and a 0.55% CSA results in the headline wholesale WACC of 3.69% (CPIH-real).

In addition, we have shared our observations on other parameters that Ofwat may want to consider changing. However, following Ofwat's guidance, we did not make any of these changes in our baseline cost of capital within this business plan.

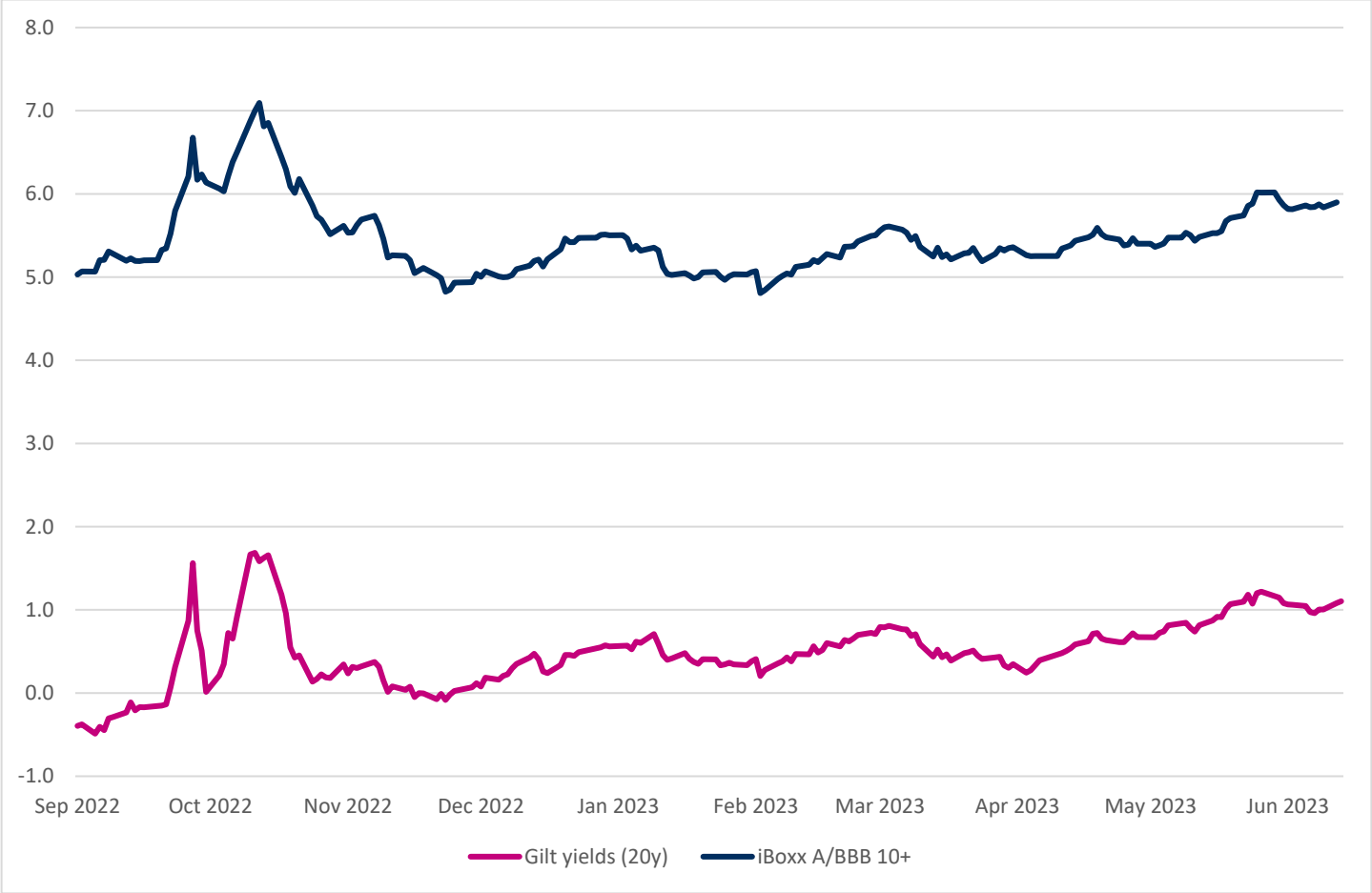
### 7.2.1 Ofwat's 'early view' return on capital allowance, updated for market data

Ofwat sets the requirement for water companies to use its 'early view' of the allowed WACC in their business plans unless compelling evidence is provided for a diverging rate[23]. The choice of the WACC allowance for the business plan is vital for testing the implied financeability of the company and its upcoming capex programme on both notional and actual bases. In its final methodology, Ofwat flagged that as a result of the sensitivity of the WACC estimate to the cut-off date used, it retains the option to update the WACC allowance, taking into the account market rates closer to the start of AMP8. In addition, because of the considerable volatility in the market Ofwat has indicated that it may index the risk-free rate[24]. While risk-free rate indexation may address some of the volatility during the price control period, it is important to ensure that the rates used within our business plan are as representative as possible of the market conditions that we can expect to prevail during AMP8, to accurately test whether our plan is financeable and delivers value for customers.

Ofwat has highlighted that from the 'early view' cut-off of 30 September 2022 to an alternative cut-off of 30 October 2022, the implied WACC increases from 3.14% to 3.53%, respectively[25]. So, we find it reasonable and prudent to update the market rate data up to the prevailing level at the start of our business plan process – we work with a 13 June 2023 cut-off date. This update reflects the significant market movements since 30 September 2022 and in our view is likely to be more in line with Ofwat WACC estimate at the time of its final determinations. Figure 22 below shows 20-year index-linked gilts and an £ iBoxx non-financial A/BBB 10+ index, both used in Ofwat's WACC allowance methodology.

[23] Ofwat (2022), 'Creating tomorrow, together: consulting on our methodology for PR24. Appendix 12 - Business plan incentives.' July 2022, p.13.
[24] Ofwat (2022), 'PR24 Final Methodology—Appendix 11 Allowed return on capital', December, p.6.
[25] Ofwat (2022), 'PR24 Final Methodology—Appendix 11 Allowed return on capital', December, p.6.

**Figure 22 UK gilt yields (20 year, real) and iBoxx A/BBB 10+ yields**




Source: Oxera analysis of Bank of England and IHS Markit data.

We have used the methodology consistent with the final methodology and market data as of 13 June 2023 to estimate a WACC allowance to be used within this business plan. We have updated the following parameters in our estimation.

- One-month average of UK Government 20-year index-linked gilt yields increased from -0.05% (RPI-real) on 30 September 2022 to 1.05% (RPI-real) on 13 June 2023. Combined with the RPI-CPIH wedge of 0.54%, this increases our risk-free rate estimate in CPIH-real terms from 0.47% to 1.60%.

- We do not update equity beta, as Ofwat may exercise discretion when choosing the point estimate from various averaging and estimation windows and it is not obvious how Ofwat would update the estimates.

- One-month average of £ iBoxx non-financial A and BBB 10+ yields increased from 5.49% (nominal) to 5.81% (nominal). After applying a 0.15% debt outperformance adjustment and a CPIH inflation assumption, this is equivalent to an increase in the cost of new debt allowance from 3.28% to 3.59% in CPIH-real terms.

Combining these market data updates from 30 September 2022 to 13 June 2023, led to an increase in CPIH-real cost of equity from 4.14% to 4.56% and an increase in CPIH-real cost of debt from 2.60% to 2.65%, respectively. Hence, this results in an updated WACC estimate of **3.51% (CPIH-real)** at the appointee level and **3.45% (CPIH-real)** at the wholesale level.

## 7.2.2 Company-specific allowance

As a small water only company, we consider it appropriate to have a CSA on the cost of debt. In its 'early view', Ofwat proposed a CSA of 0.30% on the embedded cost of debt and has invited more evidence to be submitted on other components of the cost of debt[26]. We have commissioned Oxera to assess the appropriate value for the CSA to the allowed cost of debt for AMP8, based on water sector data[27].

Oxera has used 2021/22 data on water companies' active debt instruments, published by Ofwat, and a methodology conceptually extending the one that was used by Ofwat and the CMA at PR14 and PR19 to provide an up-to-date estimate of a CSA and concluded that a **CSA of 0.55%** on the cost of embedded debt is supported by the evidence.

[26] Ofwat (2022), 'PR24 Final Methodology—Appendix 11 Allowed return on capital', December, p. 89.
[27] Oxera (2023). 'PR24 company-specific adjustment to allowed cost of debt'.

In its PR19 redeterminations, the Competition and Markets Authority (CMA) focused on the historical evidence as well as the most recent debt instrument issues to assess whether Bristol Water faced a similar (small company) premium on the cost of new debt as it does on its cost of embedded debt. The CMA found that Bristol's most recent debt issuances at the time were in line or outperforming the average for the sector. So, it concluded that no CSA on the cost of new debt was required[28]. The position for South Staffordshire Water is different to that of Bristol Water. Unlike the CMA's findings in relation to Bristol Water's debt issuances, our most recent debt issuances have faced premia in line with the historical average. As a result, we think it is reasonable and necessary for Ofwat to consider including a 0.55% CSA on the cost of debt as a whole rather than focusing on a CSA for the cost of embedded debt.

The proposed 0.55% CSA on the cost of embedded debt results in a cost of debt allowance of 2.34% (CPIH-real), based on Ofwat's 'early view' for other parameters, which is lower than our actual cost of debt, which is estimated to be 2.95% (CPIH-real) in the Ofwat PR24 balance sheet model, and lower than the average actual cost of debt of the three small water only companies, estimated to be 3.76%[29]. Therefore, we are conservative in our proposal. Indeed, our preferred methodology for the cost of embedded debt allowance would account for the specific circumstances that small water only companies find themselves with, currently considered expensive, Artesian financing taking large proportions of their balance sheets[30]. We obtained Artesian financing in 2005, at which point its coupon was fixed in RPI-real terms. Given the falling interest interest-rate environment that the markets have been in until recently, Artesian financing has appeared to be more expensive than debt portfolios of most other companies in the water sector. It still takes a significant part of our total debt portfolio, given the size of our business. As a result, our cost of debt is considerably higher than the average in the sector.

Earlier in the consultation process, we commissioned Oxera to comment on the matter of the Artesian debt. Oxera concluded the following.

"Given that Artesian debt, driving SSW's financing costs, was a reasonably competitive long-term source of financing for the company at the time of issuance and that SSW's shareholders provide support to the company, we consider it appropriate for Ofwat—i.e. in turn SSW's customers—to support the company's financial resilience by providing a cost of debt allowance that better reflects the particular circumstances of a small company and reduces the funding shortfall."[31]

We see no reason why we should be penalised on the historical cost of debt performance, given that our issuance strategy was appropriate and competitive at the time of issuing of the debt.

However, in our business plan, we follow Ofwat's PR24 approach to the CSA.

Oxera has also suggested that small water only companies are unable to raise debt as frequently as water and sewerage companies and large water only companies. Therefore, we should be awarded at least 0.26% infrequent issuer premium on the cost of new debt based on the Ofgem precedent. In addition, at PR24 water companies will face basis risk associated with the RPI/CPIH transition for RCV indexation. Ofwat has previously considered that over the course of AMP8, this debt cost premium will diminish. However, Oxera points out that – because of the lower flexibility of debt issuance – small water only companies are still likely to experience higher costs (or greater basis risk) than water and sewerage companies and water only companies. Thus, we consider it would be appropriate to award an RPI-CPIH transition premium on top of the cost of debt allowance to small water only companies. Oxera estimated it to be 0.06%, as recalibrated from Ofgem's precedent to Ofwat's allowance structure.

In our business plan, we apply only a CSA of 0.55% on the cost of embedded debt which raises the implied cost of debt in CPIH-real terms from 2.65% to 3.11% and implies wholesale WACC of 3.69% (CPIH-real). We use this WACC estimate as the baseline cost of capital for financeability testing of our plans.

In line with the final methodology, we have tested the impact of the proposed CSA uplift with our customers. Details of the engagement carried out and the outcome are set out in section 4.4.6 on page 90.

However, we note a number of potential limitations within Ofwat's balance sheet cost of debt model used to determine the embedded cost of debt for the water sector. We have jointly commissioned KPMG to develop an estimate for the cost of embedded debt based on water company business plans, latest market data and the companies' performance reports for 2022/23. The analysis will be submitted to Ofwat in November. We have included KPMG's initial commentary on the methodology applied in the model and the potential limitations in SSC29 'Estimating the cost of equity for PR24'. Updating each of these inputs to reflect a cut-off date of June 2023 (and continued used of the 2022 performance report debt inputs) results in an increase in the cost of embedded debt from 2.34% to2.50% in CPIH real terms.

### 7.2.3 WACC parameters to be updated for draft determinations

Ofwat has indicated that it will update some of the parameters when it makes its draft determinations. This is to reflect the evolution of the market data and water companies' business plan submissions. The parameters that may be updated with the

[28] CMA (2021), 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations', 17 March, para. 9.1032.
[29] The three small WOCs are South Staffs Water, Portsmouth Water, and SES Water.
[30] Applicable to South Staffs Water and Portsmouth Water, but not for SES Water.
[31] Oxera (2022), 'South Staffs Water PR24 cost of debt', 6 June, p. 16.

evolution of the market data would in the first place include the risk-free rate and the cost of new debt, whereas the share of new debt and the cost of embedded debt are among the parameters of the WACC allowance that are expected to be updated to reflect companies' submission.

- The share of new debt. Currently, Ofwat estimates the share of new debt within a notional company debt portfolio to be 17% on average across the AMP8 period[32]. This is based on a conservative assumption of 2% real annual RCV growth over the regulatory period. We expect most water companies to grow at a higher rate in AMP8 to deliver the substantial capital programmes expected from them, although we are not able to estimate the exact average RCV growth for the water sector. Under our ambitious plan for AMP8, we expect our RCV to grow by 27% between 2025 and 2030, equivalent to a 4.9% annual growth rate.

- The cost of embedded debt. We expect Ofwat to update the balance sheet model for the latest available balance sheet data. In addition, we encourage Ofwat to ensure that it accounts for the period from the date for which the data is available to the start of the price control, to accurately reflect the embedded debt costs, excluding debt that is due to mature before the start of AMP8. Finally, in the cost of embedded debt update, Ofwat should follow the CMA PR19 precedent and account for the cost of junior debt and derivatives in its embedded cost of debt estimation.

We expect both the cost of embedded debt and the share of new debt to go up at draft determinations, because of cheaper historical debt maturing, and high average RCV growth expected in the water sector driving a requirement for a higher level of new debt. The increase in these parameters will put pressure on financeability metrics.

## 7.2.4 The cost of equity needs to be higher for the incentive to invest in equity to stay the same

AMP8 marks a key point for the water sector, in which a lot of investment is going to be required to continue deliver value to customers. At the same time, Ofwat is reducing the notional gearing from 60% to 55%. This backdrop will require significant equity investments across the sector to deliver the ambitious investment plans and safeguard the capital structure across the period. Sufficient incentives are needed in order to support the business case of equity injection and therefore ensure that companies are financeable and able to properly carry out their functions.

However, the narrow spread between the cost of equity and cost of debt within the PR24 'early view' cost of capital may put these ambitions at risk. Under the current methodology, the spread between the cost of equity and the cost of new debt is at a historically low level – 0.86% and 0.97%, under the 'early view' and market update WACC respectively[33]. For comparison, the spread was 3.66% and 4.54% based on PR19 final determinations and CMA PR19 redeterminations, respectively. While some change in spreads is expected given the movement in market rates, the current levels represent a significant shift and may not provide sufficient incentive for equity capital to be injected.

Another useful cross-check for the adequacy of the spread between equity and debt costs is the framework developed by Oxera that is referred to as the Asset Risk Premium to Debt Risk Premium differential (ARP–DRP)[34]. Instead of directly comparing levered cost of equity with cost of debt, this approach seeks to benchmark unlevered cost of equity (hypothetical cost of equity for an entirely debt-free capital structure) with cost of debt. For improved comparability, the test is refined by estimating the risk premia for unlevered cost of equity (referred to as ARP) and cost of debt (referred to as DRP). Using risk premia theoretically should lower the estimation error relative to using the levels of the required returns[35]. On balance, ARP should be sufficiently higher than DRP to provide incentives to finance marginal investment using equity rather than debt.

Oxera does not suggest an optimal level of ARP–DRP spread, but the estimates for PR24 are significantly below those for PR19. The large downward shift in the differential means that equity will expect to earn a materially reduced risk premium relative to debt when compared with PR19. This will make attracting equity more difficult for the notional company. Table 26 below summarises the ARP–DRP estimation.

[32] Ofwat (2022), 'PR24 Final Methodology—Appendix 11 Allowed return on capital', December, p. 8.
[33] The cut-off date used is 13 June 2023.
[34] Oxera (2023), 'What does the cost of debt tell us about the cost of equity?', 31 May, https://www.oxera.com/insights/agenda/articles/what-does-the-cost-of-debt-tell-us-about-the-cost-of-equity/.
[35] Oxera (2020), 'Asset risk premium relative to debt risk premium', 4 September, pp. 12–13.

**Table 26 ARP–DRP differential**

| | | PR24 final methodology | BP market update WACC | Ofwat PR19 | CMA PR19 |
|---|---|---|---|---|---|
| Risk-free rate (CPIH-real) | A | 0.47% | 1.60% | -1.39% | -1.34% |
| Risk-free rate (nominal) [1] | B | 3.70% | 4.50% | 0.58% | 0.63% |
| TMR (CPIH-real) | C | 6.46% | 6.46% | 6.50% | 6.81% |
| ERP | D = C – A | 5.99% | 4.86% | 7.89% | 8.15% |
| Asset beta | E | 0.33 | 0.33 | 0.36 | 0.34 |
| Asset risk premium (ARP) | F = D * E | 1.98% | 1.60% | 2.82% | 2.79% |
| Cost of new debt (nominal) | G | 5.34% | 5.66%[2] | 2.39% | 2.19% |
| Expected loss | H | 0.30% | 0.30% | 0.30% | 0.30% |
| Debt risk premium (DRP) | I = G – B – H | 1.34% | 0.87% | 1.51% | 1.26% |
| ARP–DRP | J = F – I | 0.64% | 0.74% | 1.31% | 1.53% |

Source: Oxera analysis, Ofwat data.

Notes:
1. Risk-free rate is based on nominal 20-year UK government bond yields.
2. Nominal cost of new debt is estimated consistent with Ofwat methodology, using iBoxx £ non-financial A/BBB 10+ yields minus 15bps outperformance adjustment.

## 7.2.5 WACC parameters we suggest for methodological updates

To create sufficient incentive for equity investors to provide capital, we encourage Ofwat to review its methodologies for a few parameters of the WACC allowance. We do not update these parameters within our business plan to stay within the guidance set by Ofwat. However, we think there is sufficient evidence for Ofwat to consider a change. In particular, some of these changes may address the issue of the cost of equity allowance being low compared to the cost of new debt allowance, as identified by the cross-checks above.

To support this review we have jointly commissioned a piece of research by KPMG – 'Estimating the cost of equity for PR24' (see SSC29). This report provides detailed analysis supporting a recommended revision of the main components of the CAPM and we urge Ofwat to review the additional evidence carefully.

The combined effect of the recommended adjustments is to increase the credible range for the wholesale cost of equity to between 5.11% and 5.71%, assuming 55% gearing. This uses updated market date in June and compares with a comparable range of 3.75% to 4.74% based on Ofwat's methodology decisions rolled forward.

The key drivers of difference between the KPMG cost of equity estimate (on a 55% gearing basis) and the Ofwat's final methodology for PR24 (updated for June 2023 cut-off) are as follows.

- Market movements since the PR24 final methodology. This relates to movements in market data between June 2023 and the September 2022 cut-off used in the final methodology. The impact on the cost of equity primarily driven by an increase in the risk-free rate, which is partially offset by reductions in beta and total market return based on latest market data and Ofwat's methodologies.

- Risk free rate. The difference relates to the inclusion of adjustments to reflect the convenience yield in index-linked gilts and that investors' risk-free borrowing rate is higher than their risk-free saving rate. These adjustments are not applied in the final methodology.

- Total market return. The difference in the total market return is primarily driven by the adjustments made to Ofwat's approach to address methodological issues in ex ante total market return estimates set out in the final methodology.

- Beta. The difference relative to the final methodology reflects:
  - the inclusion of National Grid as an additional comparator to price the change in forward-looking risk arising from the significant increase in capital intensity for AMP8 and beyond;
  - full exclusion of the impact of the war in Ukraine; and
  - reduction in the weight assigned to data affected by the COVID-19 pandemic such that the resulting estimate assumes a reoccurrence of a similar pandemic once in every 20 years.

- Aiming up. A difference of 15bps relates to aiming up. The adjustment for aiming up is required to avoid disincentivising levels of investment required for AMP8 and beyond in the context of parameter uncertainty.

- Retail margin adjustment. The removal of the retail margin adjustment reflects conceptual and methodological issues

for the adjustment in the final methodology and results in a difference of 13bps.

The cost of equity estimate derived in the KPMG report is consistent with several principles implied by the CMA's determination of the allowed cost of equity at PR19, supporting consistency with the outcomes of previous price control whilst recognising the new challenges faced by the sector. These principles are important for investor confidence and availability of capital given the long-term financing commitments made by investors in regulated infrastructure. The majority of drivers of difference between the cost of estimate in the KPMG report and the final methodology stem from the application of these principles.

As the CAPM does not inherently price asymmetric risk, the required remuneration will need to be priced in to the selection of the cost of equity point estimate. The proposed design of regulatory mechanisms, in particular the calibration of ODI targets and rates, removal of caps and collars and the introduction of PCDs, will likely represent a key determinant of asymmetric exposure.

The requirement for significant new equity capital, against the backdrop of increasing business risk and macroeconomic volatility, underscores the importance of the AMP8 cost of equity as a mechanism to attract and retain equity capital within the sector. Estimation of a cost of equity that facilitates the achievement of the policy objectives for the sector requires a balanced consideration of available evidence for each parameter and a careful selection of a point estimate.

## 7.3 Financeability on the notional capital structure basis

**It is paramount for us to ensure that our business is financeable over AMP8 and beyond, so that we can continue to provide quality services for our customers and meet our licence conditions. Ofwat requires companies to test financeability on the notional basis at an appointee level and ensure that their proposed plans are financeable.**

Ofwat requires an 'in the round' assessment to determine whether a plan is financeable and the target credit rating of BBB+/Baa1 is maintained. Within the assessment, Ofwat's guidance is to consider a range of financial metrics. The list includes gearing, adjustment interest coverage ratio (AICR) and funds from operation to net debt (FFO/Net debt) – although reporting everything that is required, we focus on these metrics in drawing our conclusions, because these are key for credit rating agencies. As per Ofwat's guidance, AICR and FFO/Net debt are considered in a baseline 'Ofwat' specification, as well as an alternative specification more closely aligned with the methodologies used by Moody's and S&P.

Ofwat calculates the ratios using the following formulas.

$$AICR = \frac{FFO + (Interest\ expense - Inflation\ accretion) - (RCV\ runoff + IRE\ TOTEX)}{(Interest\ expense - Inflation\ accretion)}$$

$$\frac{FFO}{Net\ Debt} = \frac{Funds\ from\ operations}{Net\ debt}$$

Credit ratings agencies use a range of factors to determine the exact rating for a company. However, to ensure we maintain at least a BBB+/Baa1 rating, it is important to perform above the threshold on the key metrics. Moody's AICR threshold for BBB+/Baa1 is 1.5x and S&P FFO/Net debt threshold is 9%. At the same time, small water only companies should maintain adequate headroom above the minimum rating threshold, as credit rating agencies perceive they face higher risk than larger water companies. For example, Moody's states that:

"Because of their smaller size and the associated risks in relation to cash flow stability, we would expect smaller companies, such as the water-only companies, to exhibit a stronger AICR for an equivalent gearing level."

So, we interpret that Moody's AICR for small water only companies should be closer to the upper bound of its BBB+/Baa1 band of 1.5–1.7x – that is, closer to 1.7x. While this range sets out a soft target for the notional company, Moody's requirement to the actual company including the non-appointed business is to maintain ACIR of at least 1.7x for the target BBB+/Baa1 rating.

We follow Ofwat guidance in setting the input parameters for notional financeability testing. As discussed above, we have used Ofwat's 'early view' WACC updated for changes in the underlying market data and an updated embedded debt CSA of 0.55%. In addition, in line with the guidance we have made the following assumptions.

- The opening gearing is at the Ofwat notional level of 55%.
- the opening proportion of index-linked debt is assumed to be 33% and 90% linked to RPI; all new index-linked debt is linked to CPIH.
- RCV run-off rates are 4.5%.
- The PAYG rate is at the natural level.
- The dividend yield is 4% in line with Ofwat's guidance.
- The analysis is undertaken at the appointee level.
- No true-ups from the previous AMP are accounted for.
- No totex out- or underperformance is assumed.
- No ODI penalties or rewards are assumed.
- The actual cost of debt is assumed to be in line with the allowance.

Under these assumptions, we find that the notional company is financeable over AMP8. Table 27 below sets out the key ratios.

**Table 27 Notional company financeability**

| Key financial ratios | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 5-year average |
|---|---|---|---|---|---|---|
| Adjusted cash interest cover ratio (Ofwat) | 1.89 | 1.81 | 1.72 | 1.64 | 1.60 | 1.71 |
| Adjusted cash interest cover ratio (alternative) | 1.89 | 1.81 | 1.72 | 1.64 | 1.60 | 1.71 |
| Funds from operations/net debt (Ofwat) | 11.4% | 10.8% | 10.1% | 9.6% | 9.6% | 10.2% |
| Funds from operations/net debt (alternative) | 10.5% | 9.9% | 9.3% | 8.8% | 8.7% | 9.3% |
| Gearing – appointee | 55.1% | 57.0% | 59.2% | 61.3% | 62.2% | 59.2% |

AICR is the same both under the Ofwat and alternative methodology, averaging 1.71x across AMP8, although declining to 1.60 by 2029/30. While this is above Moody's minimum threshold of 1.5x for the BBB+/Baa1 rating, it is a stretching outcome once we account for Moody's requirement for small water only companies to have headroom above the minimum threshold. FFO/Net debt (alternative), which is most closely aligned to the S&P methodology, is 9.3% on average across the regulatory period. The ratio is consistent with S&P's minimum threshold of 9% for BBB+/Baa1 rating. There is a downward trend in the metrics, which are falling closer to (or slightly below) their minimum thresholds by 2030. As for the gearing, our average notional gearing over the period is 59%. But there is still an upward trend in gearing, with notional gearing rising by 7 percentage points over the regulatory period.

In its final methodology, Ofwat considered the guidance issued by credit rating agencies does not imply an automatic downgrade that would result from a breach of minimum requirements for individual metrics[36]. Hence, Ofwat can exercise discretion when assessing financeability 'in the round' such that companies may be deemed financeable even when not all of their ratios satisfy the thresholds. An 'in the round' assessment of notional financeability suggests the company would maintain BBB+/Baa1 rating over AMP8. Notional metrics of our company are on average above minimum thresholds over AMP8. However, the worsening trend in the metrics indicates long-term financeability beyond 2030 remains a concern. This may imply the need for equity injections, which would be challenging for the notional company to achieve given the current proposed level of the allowed return on capital. In particular, the low spread of the return offered to equity investors over the return required by debt investors may not be sufficient to attract new equity.

## 7.4 Financial resilience of our plans on the actual capital structure basis

**It is, however, the South Staffordshire Water company with its actual parameters that delivers the service to customers, and we need to ensure that this company, in addition to the notional one, is financeable and financially resilient to downside shocks.**

Ofwat requires companies to ensure that their business plans, on the basis of the actual capital structure, are financially resilient in AMP8 and beyond. Companies are also required to choose a target a credit rating and where it differs from the notional target of at least two notches above investment grade (BBB+/Baa1) justify why it is appropriate.

Our assessment of the financial resilience of the actual company is based on the same methodology as the financeability assessment for the notional company. In particular, we test whether financial credit metrics meet their thresholds for the target credit rating. We limit our assessment to those definitions of the ratios that are closer to credit rating agencies' definitions, namely AICR as calculated by Ofwat and using Moody's methodology including non-appointed business, FFO/net debt using S&P methodology and gearing. Our target credit rating for the actual company is also BBB+/Baa1.

The key differences from the notional company in our assumptions are that we use the actual weighted average nominal cost of debt, actual projected gearing, and actual proportion of inflation-linked debt. We also include revenues from PR19 reconciliation and non-appointed business. We have used our own in-house financial model to calculate the key metrics.

In assessing financeability, we also adopt the actual rating guidance and definitions given to us for water only companies by the rating agencies as set out in table 28 below.

[36] Ofwat (2022), 'PR24 Final Methodology— Appendix 10 Aligning risk and return', December, p.46.

**Table 28 Ratings guidance**

| | Moody's gearing | Moody's AICR | S&P gearing | S&P FFO/Debt |
|---|---|---|---|---|
| A2/A | 50-55% | Over 2.0x | | 13-23% |
| A3/A- | 55-65% | 1.7-2.0 | | 9-13% |
| Baa1/BBB+ | 65-72% | 1.5-1.7 | Less than 70% | More than 9% |
| Baa2/BBB | 72-80% | 1.3-1.5 | Less than 78% | More than 6% |
| Baa3/BBB- | More than 80% | 1.1-1.3x | More than 78% | Less 6% |
| Below Baa3 | | Below 1.1x | | |

Table 29 below shows the key ratios for the actual company in the base case (including non-appointed business).

**Table29 Actual company financeability**

| Key financial ratios | 2025/ 26 | 2026/ 27 | 2027/ 28 | 2028/ 29 | 2029/ 30 | 5- yr avg. |
|---|---|---|---|---|---|---|
| Adjusted cash interest cover ratio (Moody's, including non-appointed business) | 1.93 | 1.81 | 1.71 | 1.62 | 1.58 | 1.73 |
| Funds from operations/net debt (S&P) | 8.8% | 8.5% | 8.2% | 7.8% | 7.9% | 8.3% |
| Gearing | 66.9% | 67.8% | 68.9% | 70.0% | 70.3% | 68.8% |

Under the actual company assumptions, the company is financeable over AMP8 at the target rating of BBB+/Baa1. The modelled AICR is on average in line with the 1.7x threshold advised for small water only companies, and is above when the Moody's definition of the ratio is considered. FFO/net debt performance is more borderline but as part of an 'in the round assessment' should be broadly sufficient to maintain BBB+ rating, averaging around 8.3% over AMP8. However, the trends for all considered ratios, including AICR, FFO/net debt and gearing, are adverse, showing weakening financeability of the actual company over AMP8.

In addition to the assessment of the base case, we have stress-tested our plans in AMP8 and beyond. As required by Ofwat, we tested the expected performance of the actual company under a range of downside scenarios. We used Ofwat's recommended list of scenarios.

- Totex underperformance (10% of totex) over five years.
- ODI underperformance payment (3% of RORE) in one year applied in year 2.
- Inflation under forecast: inflation being below the assumption for the base case in the business plan (2% below in each year of the price review period).
- Deflation of -1% for two years, followed by a return to the long term inflation target. The deflation is in years 1 and 2 to allow time for the return to the long-term inflation target.
- High inflation: a 10% spike in inflation with a 2% increase in wedge between RPI and CPIH, followed by two years at 5% and a 1% increase in wedge.
- Increase in bad debt (20%) over current bad debt levels applied in years 2 and 3.
- High cost of new debt: debt refinanced as it matures, with new debt financed at 2% above the forward projections of interest rates.
- Financial penalty: equivalent to 6% of one year of appointee turnover applied in year 2.

We have considered these scenarios in relation to our long-term viability statement published in July and concluded that they cover the majority of scenarios we modelled. So, we have modelled only one additional scenario, which relates to the possible investment for Fens reservoir. There is significant uncertainty on the timing, cost and delivery vehicle for this new reservoir and we have not included it in our base plans. We set out more details in SSC03 'Fens reservoir – our approach into AMP8'. However, we think it is important to model the impact on our financial resilience if this scheme went ahead as an in-house solution. The current projection of costs for AMP8 is £140 million shared 50/50 between ourselves and Anglian Water. Because of the level of uncertainty, we have modelled our share plus a 50% contingency, so £105 million in total, and assumed it is all treated as capex.

The results of the scenario stress testing are presented in table 30 below. The ratios presented are the averages over the AMP8 period and the lowest metric in one particular year. In assessing the metrics, we have considered the thresholds as set out in the table and have used a RAG status.

**Table 30 Actual company financial resilience**

| Key financial ratios | | AICR (Moody's, inc. non-appointed business) | FFO/net debt (S&P) | Gearing |
|---|---|---|---|---|
| Base-case scenario | Average | 1.7 | 8% | 69% |
| | Lowest | 1.6 | 8% | 70% |
| Totex underperformance (10%) | Average | 1.1 | 5% | 75% |
| | Lowest | 1.0 | 5% | 80% |
| ODI underperformance payment | Average | 1.6 | 8% | 70% |
| | Lowest | 1.3 | 7% | 71% |
| Inflation under forecast | Average | 1.6 | 9% | 70% |
| | Lowest | 1.5 | 8% | 73% |
| Deflation | Average | 1.7 | 9% | 70% |
| | Lowest | 1.6 | 8% | 71% |
| High inflation | Average | 1.8 | 6% | 68% |
| | Lowest | 1.6 | 3% | 70% |
| Increase in bad debt | Average | 1.7 | 8% | 69% |
| | Lowest | 1.6 | 8% | 70% |
| High cost of new debt | Average | 1.6 | 8% | 69% |
| | Lowest | 1.4 | 7% | 71% |
| Financial penalty | Average | 1.6 | 8% | 70% |
| | Lowest | 1.2 | 6% | 71% |
| Bespoke scenario – Fens reservoir | Average | 1.5 | 7% | 80% |
| | Lowest | 1.3 | 6% | 84% |

We find that the credit metrics above are, in most cases, consistent with a weaker Baa2/BBB rating but in the case of a totex overspend, the shock most likely to impact us, credit quality is significantly reduced. The Board has discussed with the shareholders actions that could be taken in these circumstances to make the business more robust for the longer term. These have included restricting dividends and further equity injections. As an illustration of the impact these may have, we have modelled an equity injection of £35 million. We have rerun the stress-test scenarios and the outputs are set out in table 31 below.

**Table 31 Actual company financial resilience based on an illustrative £35 million equity injection**

| Key financial ratios | | AICR (Moody's, inc. non-appointed business) | FFO/net debt (S&P) | Gearing |
|---|---|---|---|---|
| Base-case scenario | Average | 1.9 | 9% | 64% |
| | Lowest | 1.7 | 9% | 66% |
| Totex underperformance (10%) | Average | 1.2 | 6% | 70% |
| | Lowest | 1.1 | 5% | 76% |
| ODI underperformance payment | Average | 1.8 | 9% | 65% |
| | Lowest | 1.5 | 8% | 67% |
| Inflation under forecast | Average | 1.8 | 10% | 65% |
| | Lowest | 1.6 | 9% | 68% |
| Deflation | Average | 1.8 | 10% | 65% |
| | Lowest | 1.7 | 9% | 67% |
| High inflation | Average | 1.9 | 7% | 64% |
| | Lowest | 1.7 | 3% | 66% |
| Increase in bad debt | Average | 1.9 | 9% | 64% |
| | Lowest | 1.7 | 9% | 66% |
| High cost of new debt | Average | 1.8 | 9% | 64% |
| | Lowest | 1.6 | 8% | 67% |
| Financial penalty | Average | 1.7 | 9% | 65% |
| | Lowest | 1.4 | 7% | 67% |
| Bespoke scenario – Fens reservoir | Average | 1.6 | 8% | 75% |
| | Lowest | 1.4 | 7% | 80% |

Such an injection would improve our credit metrics such that they are consistent with a Baa1/BBB+ rating on most scenarios. On this basis, the Board considers that the business would be financeable from a debt perspective and would have an improved ability to absorb shocks. However, it is also noted that the return on equity falls further below Ofwat's assumptions.

Our shareholders would support injecting fresh equity. However, doing so is not easy. There are a wide range of factors at play, not least the perception of the investability of the UK water sector relative to the alternatives in the global market and, most importantly, the outcome of Ofwat's determination of this plan. As such, we propose to further consider this option further once the outcome of the determination of our plans is known.

## 7.5 Further mitigations to scenarios

**As set out above, an equity injection would improve our credit metrics to a level consistent with the target Baa1/BBB+ under most stress tests. However, under some scenarios, in particular the totex, equity would not restore metrics to an appropriate level as it has a more limited impact on FFO and interest.**

We have considered what other mitigations that we would use to ensure metrics recover and these are set out in table 32 below.

**Table 32 Further mitigations to stress test scenarios**

| Mitigation | Explanation |
|---|---|
| Delay or defer totex | We have a good track record historically of spending totex within our allowances. Even where we have experienced unexpected cost increases, we have been able to take actions to manage this and reprioritise our overall programme to ensure we can offset these costs while still delivering for customers. |
| Regulatory mechanisms | There are a number of regulatory mechanisms in place for water companies that protect us from significant shocks. In particular, totex is subject to cost sharing that shares the out- or underperformance of costs between customers and investors. Although this is an end-of-period adjustment and would not be beneficial in the short term, it would ensure that metrics would recover to the target level in the medium term. |
| Contracting | As part of our risk management controls, we would look to lock in a number of our key contracts over the period to help mitigate any sudden cost shocks. Early in the current AMP, we hedged the majority of our energy, which has helped to protect us from the recent significant increase in market rates. |
| Uncertainty mechanisms | As outlined above, energy costs have increased significantly during the current period. This represents a significant proportion of our base costs. We are proposing an uncertainty mechanism to cover circumstances where energy costs increase by more than 10% compared to CPIH. |

Overall, we consider the mitigations outlined above would enable us to maintain our investment grade credit rating while still delivering on our commitments to customers.

## 7.6 Financeability – reverse stress testing

### 7.6.1 What is the limit and why has it been chosen?

In determining the headroom and extent of stretch for each scenario, we have considered the most sensitive metric and hence the key driver which would impact it.

For most scenarios, we think that the FFO used in the calculation of the Moody's AICR is the most appropriate metric as not only does it represent the threshold to maintain an investment grade credit rating with them, but also most of our key debt covenants require an AICR of >1.0 to ensure we are not in default. Some scenarios have a greater impact on interest and net debt and we have used those where it is more appropriate.

We have reverse stress-tested each year in isolation as we think it is more realistic that any additional impact would spike in one particular year rather than being spread across several years. It also avoids having to make a judgement on the phasing of any particular scenario as the headroom in each year is simply the gap between the original stress test and the additional stretch that hits the minimum threshold.

Table 33 below summarises the approach for each scenario.

**Table 33 Approach taken for each scenario and why it has been chosen**

| Scenario | Headroom and stretch metric | Minimum threshold | Year-on-year or over several years? |
|---|---|---|---|
| Totex | Additional totex above the 10% scenario to hit minimum threshold | AICR < 1.0x | Year-on-year |
| ODI underperformance | Additional penalty as a percentage of regulated equity to hit minimum threshold | AICR < 1.0x | Year-on-year |
| Inflation | Inflation level above scenario to hit minimum threshold expressed as FFO | AICR < 1.0x | Year-on-year |
| Deflation | Inflation level above scenario to hit minimum threshold expressed as FFO | AICR < 1.0x | Year-on-year |
| High inflation | Level of RPI/CPIH wedge to impact S&P FFO/Net. This metric is materially impacted as we have a significant level of RPI index-linked debt | FFO/Net Debt < 6.0% | Year-on-year |
| Bad debt | Additional percentage increase in the bad debt charge to hit minimum threshold expresses as FFO | AICR < 1.0x | Year-on-year |
| New debt financing | The additional interest rate to hit minimum threshold expressed as cash interest | AICR < 1.0x | Year-on-year |

| Scenario | Headroom and stretch metric | Minimum threshold | Year-on-year or over several years? |
|---|---|---|---|
| Financial penalty | The additional interest rate to hit minimum threshold expressed FFO | AICR < 1.0x | Year-on-year |
| Fens reservoir | Additional totex to hit maximum gearing threshold | Net debt > 80% | Year-on-year |

The outcome of the reverse stress-testing is set out in table RR.17. The scenarios which have more limited headroom are the:

- totex scenario where there is very little headroom by the end of the period (0.1%) to keep AICR above 1.0;
- RPI/CPIH wedge scenario where FFO/Net Debt in the first three years under the original scenario are already at or below the minimum threshold; and
- Fens reservoir scenario where we exceed our covenant gearing levels from year 3.

As set out in the section above, additional headroom could be created through an equity injection, although the impact on FFO and interest is more limited in the totex and RPI/CPIH wedge scenarios above. We have set out how we might mitigate severe totex pressures in table 33 above. The sensitivity of the RPI/CPI wedge demonstrates the importance of an appropriate CSA to the cost of embedded debt being allowed by Ofwat for smaller companies with long dated RPI index-linked debt.

## 7.7 Financeability beyond 2030

Although PR24 focuses on the five years between 2025 and 2030, it needs to be in the context of the longer term and that in particular that companies remain financeable. We already consider this in our annual long-term viability statement. The latest version, which we published in July 2023 considered the period for ten years to 2033.

As part of this business plan submission, we have modelled the five years from 2030 to 2035 using our own in-house model and considered the key financial metrics. In doing, so we have made the key assumptions set out in table 34 below.

**Table 34 Assumptions for modelling beyond 2030**

| Key Area | Assumptions |
|---|---|
| Totex | We have assumed that costs are as those for AMP 8 in real terms. We have assumed that an increase in enhancement expenditure for AMP9 in our LTDS is offset by lower base expenditure on storage reservoirs. |
| Retail costs | We have assumed that retail costs are consistent with the 2025/30 period with allowances rebased to 2027/28 prices. We have not assumed any further indexation of costs over the period. |
| PAYG rates | We have assumed that we continue with the natural rate based on the split of opex and capex. |
| RCV run-off | This remains at 4.5% for the period. |
| End-of period PR24 reconciliations | We have assumed that there are no net adjustments from the various reconciliations – for example, totex and ODIs. |
| WACC | We have assumed that the WACC remains unchanged from our PR24 assumptions. |
| Dividend yield | This remains at 4%. |
| Customer numbers | This grows in line with our property growth projections from new developments. |

The key metrics for Moody's AICR, S&P's FFO/Net Debt and gearing are summarised in table 35 below for both the average and the lowest value

**Table 35 Summary metrics for 2030/35**

| Metric | 2030/35 Average | 2030/35 Low | Target level |
|---|---|---|---|
| AICR | 1.6x | 1.6x | 1.7x |
| FFO/Net Debt | 8% | 8% | 9% |
| Gearing | 68% | 69% | <75% |

The modelling output shows that metrics are at levels marginally below our target credit rating, being at Baa2/BBB. As discussed above, we have also considered the impact of an equity injection of £35 million in AMP8 for the five years from 2030 to 2035. In this situation, the key metrics are set out in table 36.

**Table 36 Summary metrics for 2030/35 with equity injection**

| Metric | 2030/35 Average | 2030/35 Low | Target level |
|---|---|---|---|
| AICR | 1.7x | 1.7x | 1.7x |
| FFO/Net Debt | 9% | 9% | 9% |
| Gearing | 64% | 65% | <75% |

This would restore the metrics to a level consistent with the target rating of Baa1/BBB+. As mentioned above, this option will be considered further once we receive our draft determination.

## 7.8 Overall balance of risk and return

**We have used Ofwat's guidance for our initial assessment of risk ranges. We have then considered our historical performance, the type of risk and what mitigations can use.**

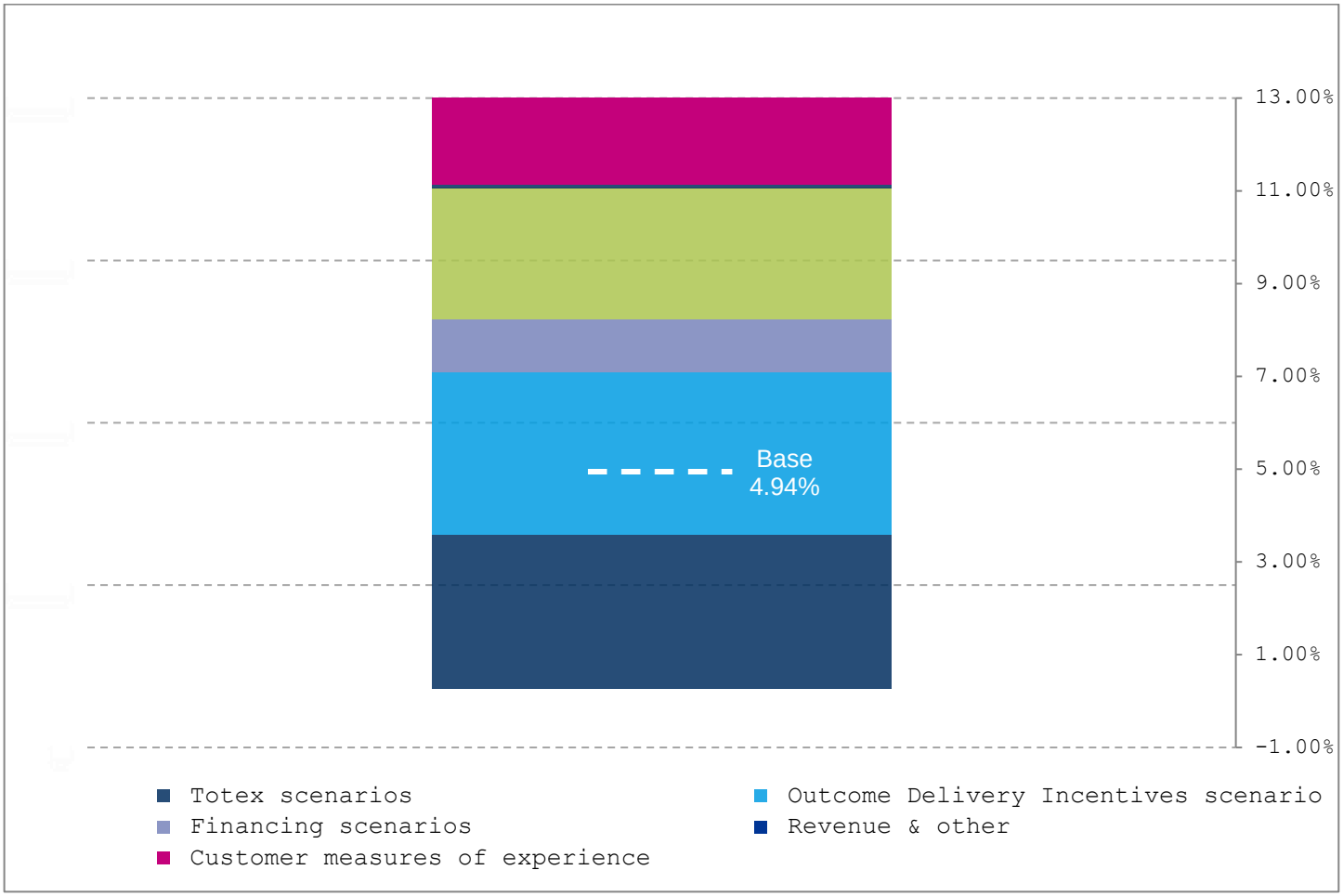
In summary, our indicative PR24 RORE risk range for the notional company is set out in table 37 below.

**Table 37 Summary of calculated RORE ranges**

| Component of risk | Reasonable downside (P10) | Reasonable upside (P90) |
|---|---|---|
| Totex | -1.34% | 1.34% |
| Retail costs | -0.55% | 0.55% |
| Outcome delivery incentives | -2.00% | 2.00% |
| Financing | -0.65% | 0.70% |
| Customer measures of experience | -1.62% | 1.28% |
| Revenue incentive mechanisms | -0.05% | 0.00% |
| Total | -6.21% | 5.88% |

The RORE range excluding uncertainty mechanisms by element is set out in figure 23 below.

**Figure 23 RORE range excluding uncertainty mechanisms by element**




Our overall risk range of -6.2% to +5.9% is wider than Ofwat's indicative range of -4.9% to +4.8%. Part of this reason is that where a risk has been calculated in monetary terms, it produces a %RORE impact higher for us than for the average for the water sector. For example, our totex range above is based on a 5% over/underspend of totex compared to Ofwat's +8.5/-8.5%, yet produces a wider RORE range of -1.3%/+1.3% compared to Ofwat's -1.0%/+1.0%. This highlights the higher relative risk smaller companies face compared with larger companies.

We have serious concerns about Ofwat's derived ODI rates. The absolute scale of the ODI rates is much larger than at PR19, and in conjunction with a package of performance commitments that is more stretching and includes several penalty-only measures, this results in a package that is significantly skewed to the downside. This presents a material risk to our financeability if penalties of this scale were to materialise.

We have performed Monte Carlo simulation that shows the overall package is significantly skewed. The P10 worst case is negative at -£36.8 million and even the P90 best case is negative at +£1.1 million. These represent totals over five years. This is a RORE arrange equivalent to -3.4% to +0.1% a year, which is not in line with the expected range in Ofwat's final methodology and not aligned with the assumptions used to evaluate the WACC.

For the purposes of the RORE risk range, we expect this skew to be resolved for draft determinations, such that it is recalibrated to Ofwat's indicative range of +2% to -2%.

We provide more detail on our assessment of the ODI risk range and possible solutions to resolve this skew in SSC20 'Outcome delivery incentives risk range'.

We have set out our considerations of each component of risk, the key risks and mitigations considered in our data table commentary SSC04b for RR30.

## 7.9 Bespoke uncertainty mechanisms

These are covered in SSC19 'Base cost assessment factors including real price effects and topography claim update'.

## 7.10 Executive pay policy

**Aligning our objectives with our long-term business strategy and customer expectations is crucial to us. Each year, the Board's Nomination and Remuneration Committee is responsible for evaluating the performance measures linked to bonuses. This is to ensure a continued alignment with our strategy.**

After examining the year-end results against our targets, the Committee decides the bonus levels, while considering overall company performance. In unique situations, the Committee may adjust the bonus to reflect specific influential factors.

Our structure assigns variable pay to:

- customer service;
- ODI performance;
- the environment; and
- financial performance, including totex and cost efficiency.

In addition, we recognise there may be strategic objectives of importance to our customers and our business that may warrant us including personal objectives from time to time.

### 7.10.1 Rewards for the Managing Director and Senior Executives

The compensation for our Managing Director and senior executives is derived from a total reward package comprising a basic salary and an annual performance bonus. For some executives, long-term incentive schemes are included to entice, inspire and retain high-calibre individuals to lead the business.

Our compensation policy targets the median market practice, offering performance incentives for achieving challenging operational, financial and personal targets. This strategy fosters a strong commitment to achieving set goals and establishes a close link between customer benefits, corporate performance and overall rewards.

When it comes to performance-related pay, we believe in striking the right balance between financial metrics and those aspects that directly benefit our customers. The rewards for our Managing Director and senior executives are based on a comprehensive package that includes basic salary and an annual performance bonus. Some executive members are also eligible for long-term incentive schemes, in addition to benefits, to attract, motivate and retain individuals who possess the required leadership capabilities.

### 7.10.2 Stretching performance in variable pay

Our business plan is ambitious. It pushes our performance beyond the current levels. The Board aims to elevate our performance to place us in the upper quartile for the water sector. We think the maximum levels of executive variable pay should only be attained through exceptional outperformance of our targets. This business plan is designed to drive performance beyond our current capabilities. Therefore, exceptional performance is typically defined as exceeding regulatory or customer commitments, although it may also include the continued successful delivery of these commitments.

### 7.10.3 Short-term incentive plan

Our short-term incentive plan (STIP) operates at the end of the financial year for executives, senior managers and specialists. It considers performance across:

- customer commitments;
- environmental impacts;
- financial performance; and
- personal objectives.

For some executives, the STIP bonus supplements the long-term incentive plan, as discussed below.

### 7.10.4 Long-term incentive plan

In 2020 we introduced the long-term incentive plan (LTIP) to align the long-term interests of the Executive team and shareholders. This plan aims to retain and reward executive management of a specific calibre, while also incentivising performance over the current planning period. Multiplier arrangements apply at the end of the bonus plan cycle, with adjustments based on the extent to which the South Staffordshire Plc Group has achieved cumulative distributions and profit after tax.

Malus and clawback provisions are also in place, and all awards are subject to income tax.

The LTIP incentive is funded by South Staffordshire Plc and not South Staffordshire Water PLC. Performance is assessed each year, with each bonus plan cycle covering four performance years and awarding four annual payments. Half of the bonus is paid as STIP in the current year, while the other half is deferred or banked to the LTIP.

LTIP profiles range from 25% to 75%. At the end of the fifth year, 80% of the accrued amount at the target level can be paid, provided the person receiving the amount is still employed by the company or has left as a ‘Good Leaver’.

## 7.11 Dividend policy

**In its principles on Board leadership, transparency and governance, Ofwat recognised that dividend policy is a matter for each water company and its Board. Within the guidance, Ofwat required company to be clear about how dividend policies are applied in practice when making decisions on declaring dividends, noting the importance of linking dividend policy with delivery for customers.**

Ofwat has since noted that there is scope for all water companies to improve the transparency of how the level of dividends declared is determined each year. This includes publishing information on how dividend payments are arrived at, including how they take account of delivery to customers and other obligations.

Our dividend policy is consistent with paying a dividend yield of up to 4%, while making sure our net debt does not exceed 70% of our RCV. Because our plan includes continued high levels of investment over AMP8 we will keep the actual dividend yield under review to take account of actual performance and external factors such as inflation.

The aim of our dividend policy is to ensure that we distribute dividends that reflect the equity value created by the business. In assessing a proposed dividend, the Board will have regard to the following factors.

- Base equity returns earned – reflecting the price control allowed cost of equity.
- Performance for customers and the environment – projected rewards from performance commitments, understanding rewards earned and timing of cash collected.
- Reputational factors – customer service standards in period, any significant health and safety incidents, legal liabilities, future pension obligations and employee considerations.
- Gearing capacity and credit quality – indexation of the regulated equity portion of RCV and maintaining credit metrics consistent with a Baa1 credit rating. If the actual credit rating should be Baa2 with a negative outlook, or lower then no dividends could be approved without Ofwat consent.
- Covenants compliance – under our long-term debt agreements there are conditions that need to be met before a dividend can be paid.
- Liquidity – available working capital, liquidity and undrawn committed facilities to meet forward-looking business plan requirements for the next 12 to 18 months.
- Company law – statutory accounting distributable reserves.
- Any dividend contribution in respect of non-appointed activities.
- In the event of outperformance of allowances, we will consider if the sharing of a proportion of any rewards with investors is appropriate, taking account of the phasing across the five-year price review period, to reflect acceleration or delay of expenditure due to timing differences.

We recognise the importance of our people and have a specific commitment on employee satisfaction. We are also mindful of our obligations in respect of our pension schemes. Prudent management and additional contributions made in recent years, means our final salary pension schemes were able to significantly de-risk through an insurance policy buy-in.

We are committed to being open and transparent about our dividend policy. We will report retrospectively on our dividend payments in our annual report and financial statements each year and explain to customers and stakeholders the rationale for the actions we are taking.

# 8. Data, information and assurance

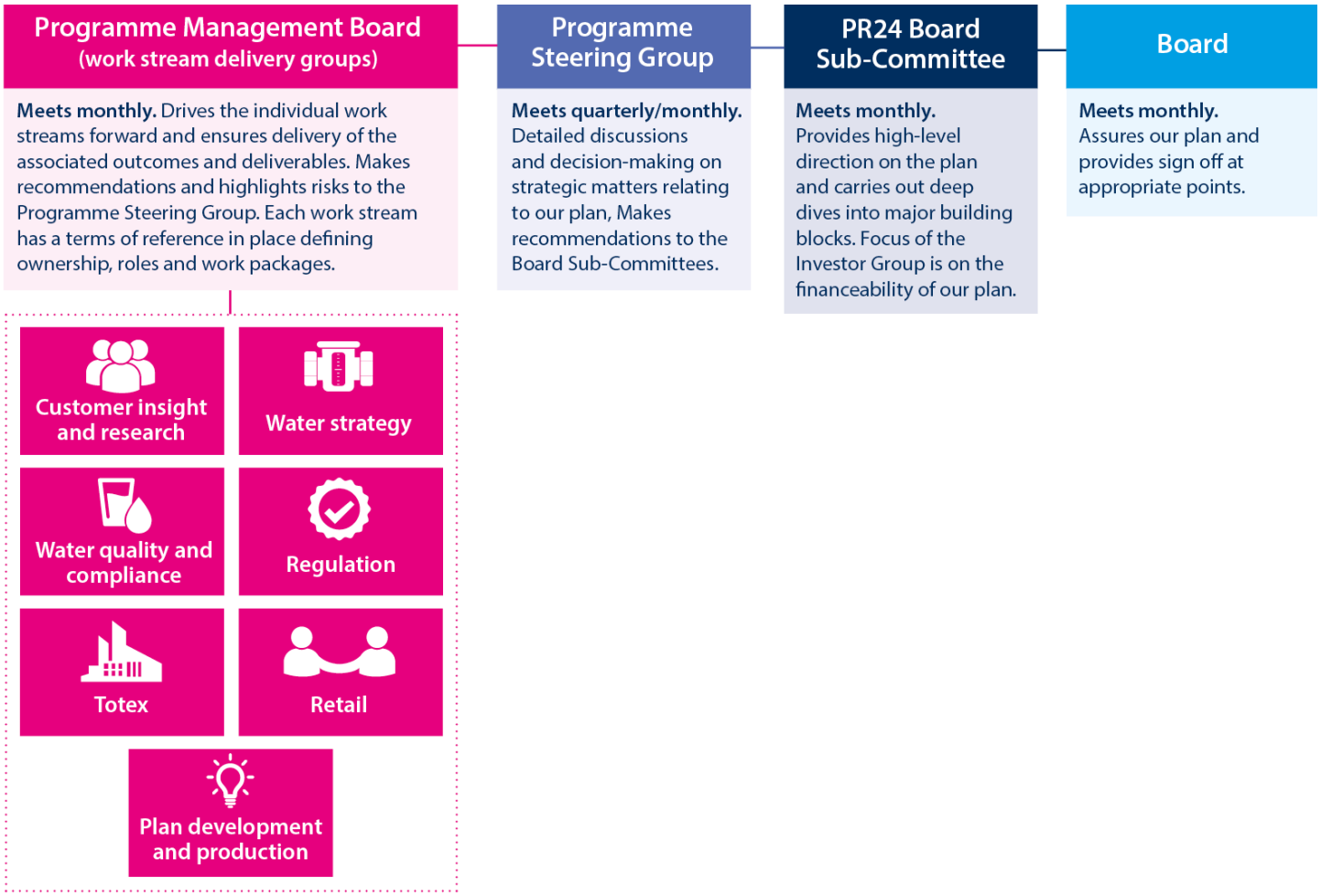
Key to ensuring we deliver the right plan for our customers, the environment and our business is having appropriate levels of governance in place and assurance that our data is accurate and complete.

## 8.1 Governance

**Governance is about how we manage our business – from the Board down to all areas of our service delivery. Because we provide an essential public service, we must always be able to demonstrate that we operate to the highest standards of leadership, fairness and transparency.**

In this way, we build trust and ensure we act in the best interests of our customers at all times. We have reviewed our governance arrangements for the PR24 price review process, making sure our investors, the Board and our Executive team have all the information they need – when they need it – to enable them to make the decisions that will ultimately shape our business plan for 2025 to 2030 and our LTDS. We have four levels of governance, which are outlined in figure 24 below.

**Figure 24 PR24 governance arrangements**



# 8.2 Assurance

**We are committed to being open and transparent about sharing performance information with customers and other stakeholders. So we have a framework in place that defines how we will deliver that transparency through appropriate levels of assurance and sign off.**

These include internal reviews carried out by senior managers across the business and using independent third parties to assure our information. We also use a risk assessment process to decide the level of assurance that is required. And we take into account the feedback we receive from our regulators and other stakeholders. This is reflected in our assurance plan, which we consult on and publish each year.

## 8.2.1 Assurance risk assessment

We use a risk assessment process to determine the minimum level of assurance for any information or data. This is because different data may have different risks associated with its compilation or accuracy – and different consequences depending on the purpose of the data.

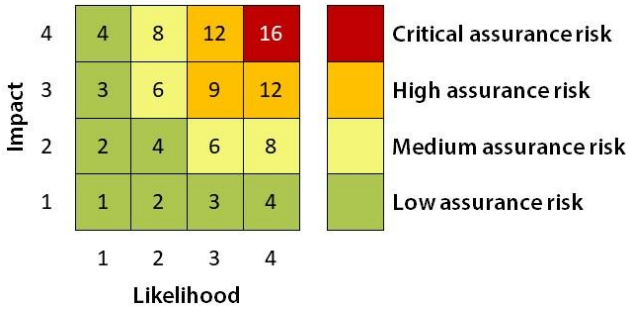
We score assurance risk by considering several factors that influence the likelihood that the data may contain an error; and the impact that inaccurate, incomplete or late data may have on the recipient or other parties. The factors we consider are shown in figure 25 below and are scored from 1 (low risk) to 4 (critical risk).

**Figure 25 Assurance risk assessment methodology**

| | |
|---|---|
| **Likelihood that data may contain an error** | **Inherent likelihood** |
| | Complexity of data sources<br>Completeness of data set<br>Extent of manual intervention<br>Complexity/maturity of reporting rules |
| | **Management controls** |
| | Control activities already established<br>Experience of our personnel<br>Evidence of historical errors and last audit |
| **Impact inaccurate, incomplete or late data will have on recipient/other parties** | Customers<br>Competition<br>Financial<br>Compliance with regulatory requirements |

We calculate an assurance risk score by multiplying the maximum scores from the likelihood assessment and the impact assessment, giving a maximum score of 16. The score enables us to assign a risk category, as set out in figure 26.

**Figure 26 Risk score categories**




We then use this score to derive the minimum level of assurance required, as set out in figure 27 below.

**Figure 27 Minimum standards of assurance**

| Category | Low assurance risk | Medium assurance risk | High assurance risk | Critical assurance risk |
|---|---|---|---|---|
| Planning | Methodology statement is required for all data | | | |
| Audit | Second person review | Independent internal assurance | Third-party assurance | Third-party assurance |
| Sign off | Manager sign off | Senior Manager sign off | Director sign off | Board sign off |

It is worth noting that in many instances, we increase the level of assurance from the minimum standards – for example, where there is a higher regulatory or customer expectation. In practice, this means many low and medium risk areas are also subject to third-party assurance and Board sign off, because they are included within our regulatory performance reporting each year. We also carry out additional 'dip' sampling to give customers and stakeholders confidence that our assurance of lower risk areas is still robust.

## 8.2.2 Roles and responsibilities

In table 38 below, we set out the different options for assurance, when it applies, who is responsible and its scope.

**Table 38 Assurance roles and responsibilities**

| Activity | When applies | Responsibility | Scope |
|---|---|---|---|
| **Planning** | | | |
| Methodology statement | All assurance categories | Person(s) or team managing or compiling the submission | Explains process to produce the submission and should include details of systems, responsibilities, timing, methodologies, calculations, etc.<br>Describes in detail the plan to complete the submission, including the timetable, responsibilities, sign off and governance meetings as relevant. |
| **Audit** | | | |
| Second person review | Low assurance category | Person with reasonable understanding of requirements, but separate from person(s) who compiled the data | Must check the submission in detail and any associated commentary.<br>Confirm adherence to and adequacy of the methodology statement.<br>Confirm accuracy of data through checking inputs, including any management assumptions and reviewing evidence to support entries or statements. |
| Internal audit | Medium assurance category and high assurance category, as appropriate | An independent internal assurance provider – e.g. Group risk, control and assurance function or a subject matter expert not directly involved in the return | Responsible for providing independent evidence of evidence verification of data and to define a level of confidence that can be placed on the overall reported data.<br>Reported/documented through formal governance channels. |
| External audit | High assurance category and critical assurance category | Audit carried out by a third party outside the company or Group<br>Independent registered audit organisations or independent experts | Responsible for providing independent evidence of verification of data and to define a level of confidence that can be placed on the overall reported data.<br>Formal report produced. |
| **Sign off** | | | |
| Manager sign off | Low assurance category | Accountable manager | Detailed review of data/narrative by a manager. |
| Senior manager sign off | Medium assurance category | Accountable senior manager | Detailed review of data/narrative by a senior manager.<br>Complete and sign a record of evidence attesting to confidence in the accuracy of the submission. |
| Director sign off | High assurance category | A single Board-level Director of a business function | Must complete and sign a record of evidence attesting to the accuracy of the submission.<br>Derives an overall confidence assessment for the submission. |
| Board sign off | High assurance category and critical assurance category, as appropriate | Company Board | Board reviews summary of submission and assurance activities followed, as presented by a relevant Director.<br>Approval of submission must be minuted to enable the completion of a record of evidence attesting to accuracy. |

## 8.2.3 The role the Board plays

The Board recognises the responsibilities that come from providing an essential public service and delivering social value. This means it is fully committed to maintaining high standards of leadership, transparency and governance, in accordance with Ofwat's principles.

In addition, we continue to apply the principles of our Corporate Governance Code on Board leadership, transparency and governance. Although South Staffordshire Water PLC is not a publicly listed company, the Board recognises that it should act as if it were, where applicable. Our Code has drawn on the principles of the UK Corporate Governance Code that may be applicable to a privately owned regulated company.

In conjunction with the Audit and Risk Committee, the Board as a whole is responsible for our systems of internal control, evaluating and managing significant risks to our business. The Committee focuses on our processes to manage business and

financial risk, and for compliance with significant applicable legal, ethical and regulatory requirements, and on aspects of financial reporting. This includes:

- assessing and monitoring the integrity of financial statements and reviewing the judgements contained within those statements;
- considering changes to accounting policies;
- reviewing our financial reporting procedures and risk management processes;
- monitoring and reviewing the effectiveness of the internal audit function; and
- monitoring and reviewing compliance with drinking water quality standards and environmental permits.

In all aspects of AMP8 planning, we rely heavily on data to support our decision-making – and it is important that the data we use is accurate so we can best reflect the needs of our customers, stakeholders and the environment in our plans.

In order for our Board to be able to have confidence in our submission and sign of the assurance statement on page 151, we have utilised the full range of our assurance framework detailed above. From a third-party perspective, we have received support from the following.

- Jacobs, which has acted as a critical friend, reviewing our business cases for enhancement schemes and confirming that our plans reflect our customers' priorities through a line of sight assessment.

- SIA Partners, which has reviewed all our customer engagement to assure it meets Ofwat's requirements of high-quality engagement.

- The Independent Stakeholder Challenge Panel, which has challenged us on the quality and breadth of our customer and stakeholder engagement and held us to account for the promises we have made to our customers and stakeholders about the services we will deliver.

We consider that using these industry experts has supported the development of our plans and made our overall submission more robust.


# Part 4:
# Looking to AMP9 and beyond

# 9. Taking a long-term view of planning and investment

A key feature of our AMP8 plans is that they are set in a long-term context. This means us always planning for the future and making sure that we phase our investments in a way that delivers best value for customers and stakeholders, and that continues to meet their expectations for the services they want us to deliver – and when they want us to deliver them.

Our LTDS, published alongside this business plans, describes our long-term ambitions. It follows Ofwat's guidance for long-term strategies, setting out what our vision means for customers and the environment over 25 years. It also sets out what we will deliver in terms of performance outcomes, along with key outputs from the strategic planning frameworks, including water capacity delivered, among other things.

At the heart of our LTDS are the WRMPs for our Cambridge and South Staffs regions, and this business plan, which sets out what we will deliver for customers and the environment in the five years to 2030. Our WRMPs provide us with a strong and mature framework for long-term planning – they also support the outcomes we want to deliver for customers and the environment over the 25 years to 2050. Using a range of optioneering and optimisation tools described elsewhere in this business plan, we have determined the best value package of investment options going forward to balance supply and demand, and keep bills affordable for our customers.

We have identified a core pathway of investments and activities for our LTDS that are designed to support long-term adaptive planning, considering a number of 'no regrets' and 'low regrets' options in accordance with Ofwat's guidance. We tested these against Ofwat's common reference scenarios to see if our enhancement investment programme needs to change – for example, in response to different levels of climate change or because of technological advances.

We have also developed two alternative pathways, to which we can adapt if circumstances change, or if we need to prioritise one are of investment over another – for example, to address a change in customers' priorities or in response to a change in regulatory requirements. We are conscious that although we can identify some of the key investments we will need to make in AMP9, the future beyond that is much less certain. So, we will develop a monitoring plan to ensure we can keep our long-term planning on track, and move from our core pathway to either of our alternative pathways if the need arises.

## 9.1 Looking ahead to AMP9

**Within this business plan, we have already identified some key programmes that will span the ten years covered by AMP8 and AMP9, and which form the core pathway of our LTDS. These include the following.**

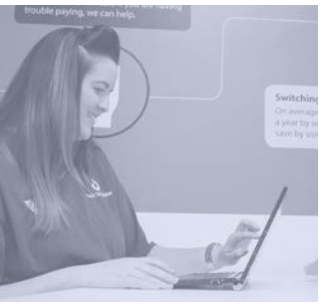
- Implementation of a smart water network across our Cambridge and South Staffs regions. This will enable us to monitor our performance effectively and manage our network more efficiently. It will also help us to achieve our ambition of maintaining a service to customers at all times.
- Achieve as close to 100% meter penetration as possible across our Cambridge and South Staffs regions. We will focus our attention on installing meters at remaining unmeasured properties across both regions, while recognising the constraints presented by the shared supplies that are more common with older housing stock.
- Delivering the chalk stream restoration programme in our Cambridge programme. This is to ensure sustainable river flows and deliver biodiversity benefits. It will also help us to deliver our environmental destination ambitions.
- Delivering a bulk transfer from Anglian Water's Grafham Water reservoir into our Cambridge region. This will deliver water supplies for our customer of around 26 Ml/d over the medium term.
- Delivering additional abstraction reductions as part of our environmental destination. This is to further protect the environment.
- Construction of the Fens reservoir. We are working in partnership with Anglian Water to deliver a new reservoir in the Cambridgeshire Fens, which will supply water into our Cambridge region. The new reservoir is scheduled to come into supply in the late-2030s.

We will keep these programmes under review, and take into account any changes in circumstance that may affect need or delivery.












# Part 5: Assurance of our plan

# Board assurance statement

The Board of South Staffordshire Water Board owns and is fully accountable for this business plan. It is able to provide to Ofwat, its customers and stakeholders, comprehensive and robust assurance, as a result not only of the scrutiny of the plans that has been undertaken, but also because the Board has been actively involved in the development of the business plan from the outset and has challenged the company's thinking throughout.

The Board recognises the importance of good assurance and governance. This is essential in order that both sectoral regulators, including Ofwat, and other stakeholders can have confidence in the information being shared with them. The Board has been involved at every stage of the development of this business plan, providing challenge where appropriate, so it can be confident that the plan is high quality and ambitious.

This business plan is intended to deliver on the company's responses to the challenges it has identified for the next five-year period, while also meeting its statutory duties and obligations.

Taken together, all the elements proposed add up to a plan that is high quality and ambitious. In endorsing this plan, the Board has taken into account all those elements, recognising the impact of certain key issues and how these have been addressed through the detail of the plan, which proactively sets out how the company proposes to manage these challenges. The plan is fully endorsed by the Board as delivering the best value to customers, communities and the environment, within the context of maintaining financial resilience over the next five years and beyond. In providing its assurance, the Board has considered the following key themes.

- Focusing on the long term. Water is a long-term business. The company always plans for the future under a range of different scenarios, which means it can adapt quickly to changing circumstances. This business plan is set within a long-term context to ensure the right levels of investment are made at the right time, for the benefit of all customers and the environment. The Board has been involved and provided challenge during the process of creating the company's 'Looking to the future' vision to 2050 and long-term delivery strategy (LTDS), which set out the company's plans for the business over the long term.

- Delivering greater social and environmental value. The company has an ambition to be a sustainable, net zero carbon business that continues to deliver value for money and long-term value for society and the environment. This means continuing to generate positive impacts for local communities and working in partnership with stakeholders to ensure it leaves the environment in a better state for future generations. The Board has been involved in the development and approval of the company's draft water resources management plans for the Cambridge and South Staffs regions, including the schemes designed to increase water supply, reduce demand and protect the environment.

- Reflecting a clearer understanding of the company's customers and communities. The company considers that delivering customers' priorities and preferences is at the heart of everything it does. It has used tailored approaches to understand more about what drives customers' different needs and has evaluated the insights to help it make the best possible decisions and shape its plans. The Board has a clear understanding of the company's plan to help customers and communities, and has taken part in some of the engagement sessions, including the Young Innovators' Panel, through which the company tested this business plan with future customers.

- Driving improvements through efficiency and innovation. The company has traditionally been at the forefront of the sector for efficiency and works hard to ensure it spends customers' money wisely. The Board has been involved in the development and approval of the company's innovation and efficiency strategies.

## Long-term delivery strategy

**In accordance with Ofwat's requirements, the Board has challenged and satisfied itself that the company's long-term deliver strategy:**

- reflects a long-term vision and ambition that is shared by the Board and company management;
- is high quality, and represents the best possible strategy to efficiently deliver its stated long-term objectives, given future uncertainties;
- will enable the company to meet its statutory and licence obligations, now and in the future;
- is based on adaptive planning principles;
- has been informed by customer engagement; and
- has taken steps to secure long-term affordability and fairness between current and future customers.

There have been multiple touch points and engagement with our Board on our long-term planning. Board members and have challenged constructively and helped to shape our strategy from the outset.

Board feedback and discussion has been integral to developing and setting our ambition and vision to 2050. There was a high degree of Board member involvement in online customer focus sessions which were designed to explore the views of both current and future bill payers.

The Board has also participated in deep dive sessions which covered in the process and methodology used to develop our core and alternative adaptive pathways and which gave members an insight into the uncertainties and risks that the business plan needs to address. It has heard directly from the external assurance providers providing which has helped it to provide invaluable independent feedback at all stages in the process in developing strategy so as to ensure that the strategy is the best it can be.

The box below sets out the primary multiple touchpoints and engagement sessions with our Board to develop the LTDS strategy through to sign off. There were also numerous less formal interactions with individual Board members which benefited from specific areas of their expertise.

The multiple touchpoints and engagement sessions with the Board to develop the LTDS through to sign off are set out below.

| Long-term delivery strategy – evidence |
|---|
| **Meetings** |
| Adaptive planning approach in company WRMPs explained at multiple touch points. |
| Board strategy day, September 2022: ambition statements shared and agreed at Board strategy day. |
| Board meeting, November 2022: customer-facing consultation on the company's long-term vision ('Looking to the future') shared and signed off. |
| Business plan key messages and challenge points agreed for the meeting with Ofwat in February 2023. |
| LTDS customer engagement works scoped and key dates shared with Board. |
| Independent led LTDS customers focus groups observed by Board members |
| In-depth stakeholder interview with Professor Ian Barker to shape the research programme. |
| Final LTDS core pathway shared with Board – demonstrating clear links with the company's regulatory commitments. |
| Evidence-based assessments for scenario testing of core pathway shared with Board. |
| Intergenerational fairness – presentation to Board of spend profiles and evidence of customer support. |
| Board meeting, June 2023: core and adaptive pathways shared and approved. |
| Board deep dive sessions on resilience and water quality climate change impacts. |
| **Documentation** |
| SSC32 'Long-term delivery strategy climate change impacts on raw water quality technical report. |
| SSC33 'Impact – SSC LTDS triangulation report' |
| **External assurance** |
| PA Consulting: Operational resilience assessment, cyber and wider. |
| Atkins: Groundwater and surface water quality assessment to climate change impacts. |
| Impact: LTDS Customer research triangulation and decision-making framework |
| Jacobs: clear line of sight from the WRMPs to the LTDS and the business plan; ensuring enhancement business cases are consistent with 'no'/'low regrets' requirements; and a clear line of sight from the customer engagement. |
| SIA Partners: evidence of engagement on the LTDS was found in 8 out of 15 research reports, indicating a substantial presence of coverage in the material provided. In addition, the LTDS was covered in real depth across the WRMPs, as well as the standalone LTDS research. "As a result, SSC has been awarded a score of (3) for this category." (Where 1 is the lowest score and 3 is the highest possible score.) |

# Acceptability and affordability

**In accordance with Ofwat's requirements, the Board has challenged and satisfied itself that:**

- the full implication of the company's business plan for 2025 to 2030 for customers was considered and that the plan achieves value for money; and
- the LTDS protects customers' ability to pay their water bills over the long term and delivers fairness between what existing customers will pay and what is paid by future customers.

The Board has taken the following steps to challenge the company and satisfy itself that the company's business plan for 2025 to 2030 delivers value for money and intergenerational fairness.

| Acceptability and affordability – evidence |
|---|
| **Meetings** |
| Board meeting, May 2023: customer engagement line of sight.<br>Board meeting, July 2023: full review of best value plan and what it means for customers.<br>Board meeting, September 2023: results of affordability and acceptability testing quantitative survey. Targeting 1,000 surveys (household and non-household), including intergenerational fairness. Qualitative results from June 2023 showed acceptability at mid-80%; indication is that the quantitative results will be closer to 70%. This is a strong majority result, given the 83% positive acceptability achieved at PR19, with a declining bill profile. Affordability at the qualitative stage in June showed affordability at just below 40%, for those saying it was 'easy'/'very easy' to pay; 31% were neutral. Expecting quantitative results to be notably lower given feedback from other water companies and emerging results. |
| **Documentation** |
| Board Sharepoint site: affordability and acceptability folder. |
| **External assurance** |
| SIA Partners: quality of customer engagement.<br>Jacobs: line of sight.<br>CEPA: reviewing water poverty reporting requirements<br>Impact: triangulation of customer engagement priorities across all projects. |

# Costs and outcomes

**In accordance with Ofwat's requirements, the Board has challenged and satisfied itself that:**

- the performance commitment levels in the plan are stretching but achievable and reflect performance improvements expected from both base and enhancement expenditure;
- the expenditure forecasts included in the company's business plan are robust and efficient;
- the needs for enhancement investment are not influenced by non-compliance or non-delivery of programmes of work (both base and enhancement) that customers have already funded;
- the options proposed within the business plan are the best option for customers and a proper appraisal of options has taken place;
- PR24 plans and the expenditure proposals within them are deliverable and that the company has put in place measures to ensure that they can be delivered. This includes setting out the steps the Board has taken to satisfy itself that the supply chain risk is manageable and delivery plans account for:
  - the ability of the company and its supply chain to expand its capacity and capability at the rate required to deliver the increased investment;
  - the impact of similar levels of growth across the sector and any overall sector and supply chain capacity constraints; and
  - key supply chain risks and capacity constraints, such as the availability of specialist resource or components – for example, river quality monitors, smart meters of SuDS designers;
- the plan includes price control deliverables covering the benefits of material enhancement expenditure (not covered by performance commitments);
- that the expenditure proposals are affordable by customers and do not raise bills higher than necessary; and
- the expenditure proposals reflect customer views, and where appropriate are supported by customers.

The Board has taken the following steps to challenge the company and satisfy itself that the company's approach to costs and outcomes is consistent with Ofwat's expectations as set out in the PR24 final methodology.

| Costs and outcomes – evidence |
|---|
| **Meetings** |
| Board meeting, February 2023: suggested common performance commitments.<br>Board meeting, March 2023: econometric modelling, cost adjustment claim and real price effects (RPEs).<br>Board meeting, April 2023: wholesale totex plan – best value and least cost options. Deep dive into enhancement and base plan expenditure.<br>Board meeting, May 2023: customer engagement line of sight.<br>Board meeting, June 2023; metering strategy.<br>Board meeting, July 2023: full totex, including retail plan.<br>In addition the Board was engaged/updated on the following.<br>• Capital programme supply chain risk, with the Audit and Risk Committee (April 2023).<br>• The PR24 capital programme (May 2023).<br>• Long-term plan project delivery performance (June 2022 and June 2023).<br>• Engagement with existing supply chain for key delivery framework contracts and critical component supplier frameworks (discussed in detail in chapter 6).<br>• Material improvements in asset management and capital delivery function maturity.<br>• AMP7 embedded tactical changes to supply chain assurance and approach as a consequence of macro-economic shocks in 2020 to 2022. Note: the company predicates its conclusions on deliverability on the assumption it will manage the micro-economic risks and issues, but that it can only manage macro-level risks and issues to a degree, and that future significant economic costs – such as those presented by the COVID-19 pandemic or the war in Ukraine – may impact deliverability. |
| **Documentation** |
| Board Sharepoint site: costs and outcomes folder.<br>Section 6.4 of the business plan on deliverability, page 118. |
| **External assurance** |
| Jacobs: assurance and feedback on all enhancement business cases.<br>Oxera: supporting the company's understanding on econometric modelling and efficiency.<br>KPMG/First Economics: support to the company on RPE mechanisms.<br>SIA Partners/Jacobs: line of sight review.<br>Aqua/Artesia: support to the company on robust costs on enhancement business cases.<br>Jacobs: metering deliverability review. |

# Risk and return

## Financeabilty

**In accordance with Ofwat's requirements, the Board has challenged and satisfied itself that it can:**

- provide assurance that the company's business plan for 2025 to 2030 is financeable on the basis of the notional capital structure. This assurance should take account of all components of the business plan, including Ofwat's early view on the allowed return on capital for PR24, and consistent with maintaining target credit ratings at least two notches about the minimum of the investment grade. Ofwat expects to company's Board to set out clear the steps taken to provide assurance, including the consideration of the financial ratios; and
- set out clearly the steps taken to provide assurance, including the consideration of the financial ratios.

## Financial resilience

**In accordance with Ofwat's requirements, the Board has challenged and satisfied itself that it can:**

- provide an assurance statement that the actual company is financially resilient over the 2025 to 2030 period and beyond under its business plan; and
- set out the steps it has taken to provide that statement, the factors it has taken account of, and the suite of financial metrics used to ensure the company is financially resilient.

Ofwat expects the company's business plan for 2025 to 2030 to demonstrate the basis on which the assessment has been carried out, including how the base case and downside scenarios have been established and assesses.

The Board can provide the following assurance the company is financeable on the basis of the notional capital structure and financially resilient on the basis of the actual structure; and that it has considered the financial ratios and the financial metrics used to ensure financial resilience.

| Risk and return – evidence |
|---|
| **Meetings** |
| Board strategy day, September 2022: early modelling and scenarios presented.<br>Board PR24 Sub-Committee, February 2023: view of the impact of modelled totex on the company's financial metrics shared, together with an action plan for improving FFO/Net debt.<br>Board PR24 Sub-Committee, April 2023: further totex modelling presented, showing the pressure on the company's financial metrics.<br>Board PR24 Sub-Committee, July 2023: update on options to improve financial metrics, equity injection and/or totex outperformance. |
| **Documentation** |
| Oxera report on the company-specific adjustment and update of the industry WACC.<br>Chapter 7 of the business plan on identifying risk and delivering appropriate returns. |
| **External assurance** |
| Oxera: review of the company's financeability assessment (notional structure) and financial resilience (actual structure), including stress testing and supporting the narrative for the business plan submission.<br>Frontier Economics: high-level review of the company's populated Ofwat financial model. |

# Customer engagement

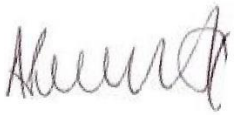
**In accordance with Ofwat's requirements, the Board should provide assurance that:**

- the company's customer engagement and research meets the standards for high-quality research; and
- any other relevant statements of best practice has been used to inform its business plan and LTDS.

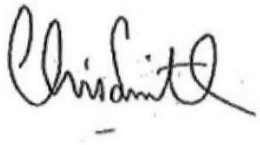
The Board has taken the following steps to challenge the company and satisfy itself that the company's customer engagement and research meets the required standards.

| Customer engagement – evidence |
|---|
| **Meetings** |
| The following key research study outputs were shared with the Board.<br>• All customer engagement projects completed have followed the company's guiding principles, which take into account Ofwat's guidance for high-quality research.<br>• All research has been delivered through independent agencies on the PR24 supplier framework, supported by academic peer reviews of the valuations research and technical triangulation process.<br>• Effective engagement from the independent Stakeholder Challenge Panel, Delphi Panel and CCW on selected studies to ensure unbiased on contextualised materials.<br>• Engagement points in 2022 on customer priorities and the company's WRMP engagement approach to communicate key insight conclusions and how these have informed the business plan.<br>Board PR24 Sub-Committee, May 2023: approach to company-specific adjustment willingness to pay valuations presented, with an effectiveness of challenge (by Stakeholder Challenge Panel) update presented in June 2023.<br>Board PR24 Sub-Committee, June 2023: approach to LTDS engagement update presented, with further engagement with nominated Board sponsor on LTDS engagement.<br>Attendance by Board members at engagement sessions – e.g. focus groups and Young Innovators' Panel.<br>Outputs of first 'Your water, your say' session held in June shared; follow-up session is on 7 November 2023.<br>Customer acceptability/affordability testing – final results in mid-September 2023. |
| **Documentation** |
| SIA Partners report. |
| **External assurance** |
| SIA Partners: robust and comprehensive assurance review to ensure the company's customer research and wider engagement meets the relevant Ofwat guidance for PR24. The draft report was delivered in July 2023, with no red RAG ratings and fully green for the triangulation approach. A limited number of amber improvements were identified for the 'high quality' engagement review – the company has an action plan in place for these. The company has rectified all but one directly, with a robust justification and plan in place.<br>Jacobs: line of sight assurance of how effectively the company has reflected customers' priorities in its business plan.<br>Stakeholder Challenge Panel: independent summary report on the 'effectiveness of challenge' of the company's business plan. |

In line with the conclusions set out above, the Board is satisfied that the business plan proposed is a financeable and deliverable plan, having reviewed the main delivery risks, mitigations, and also the financial and corporate resilience of the business to a range of severe and combined risk scenarios. The Board is satisfied that the company has demonstrated that it will maintain long-term financial, operational and corporate resilience and has appropriate mitigations in place under the range of scenarios presented.



Andy Willicott
Managing Director, South Staffordshire Water PLC



Lord Chris Smith
Chair, South Staffordshire Water PLC

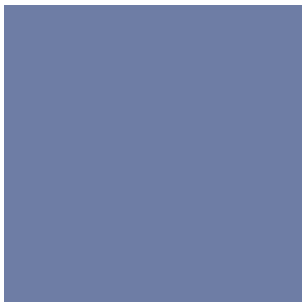
Catherine May
Senior Independent Non-executive Director

Alice Cummings
Independent Non-executive Director

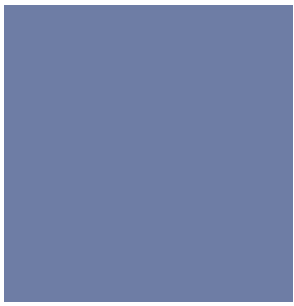
Professor Ian Barker
Independent Non-executive Director

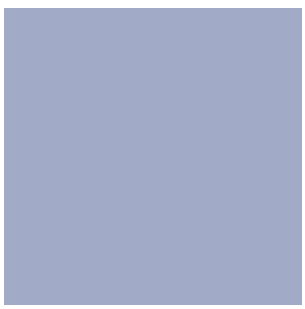
Keith Harris
Non-executive Director

Peter Antolik
Non-executive Director




# Part 6:
# Other information

# Glossary

## Below, we define some of the terminology used throughout this business plan.

**Abstraction incentive mechanism (AIM).** A reputational incentive that encourages water companies to reduce the environmental impact of taking ('abstracting') water from environmentally sensitive sites during periods of low surface water flows.

**Asset management plan (AMP).** A five-year time period used by the economic regulator Ofwat to assess key performance indicators such as water quality and customer service. AMP periods (or AMPs) are also used to set water companies' price, investment and service packages that are reflected in the bills customers pay. AMP8 covers the five years from 2025 to 2030.

**Catchment** or **catchment area.** An area of land, often bordered by hills or mountains, where water collects when it rains or snows. As the water flows over the landscape it finds its way into the soil, eventually feeding into water courses within the landscape.

**Compliance Risk Index (CRI).** A measure designed to illustrate the risk arising from treated water compliance failures. It comprises three elements: the significance of the parameter failing the standards in the Drinking Water Inspectorate's water quality regulations; the cause of the failure and the manner of investigation by the company; and the location of the failure within the water supply system, taking into account the proportion of the company's consumers affected.

**Common reference scenarios.** Scenarios for long-term planning that offer plausible 'benign' and 'adverse' future assumptions for things like climate change, technology, demand for water and abstraction reductions. They are designed to offer a full spectrum of possible futures that should be considered when developing long-term ambitions.

**Consumer Council for Water (CCW).** The consumer watchdog. CCW represents the interests of water and sewerage consumers in England and Wales and takes up unresolved complaints.

**District metered area (DMA).** An area of a water network, which can be isolated so that the inflow and outflow of water in the area can be monitored. Leaks on the network can bet identified by tracking total flow into a DMA and comparing it with metered water consumption.

**Drinking Water Inspectorate (DWI).** Provides independent reassurance that public water supplies in England and Wales are acceptable to consumers.

**Granular activated carbon (GAC) adsorbers.** A proven method to remove organic chemicals from water.

**Infrastructure renewals expenditure (IRE).** Expenditure on replacing existing infrastructure, prolonging the lifetime of assets without adding new functionality.

**Invasive Non-Native Species (INNS).** Species that have been introduced into the UK by human activity and that could have negative impacts on native biodiversity, the economy or on human health. INNS are estimated to cost the UK economy at least £1.8 billion a year and have led to declines of some native species, including the white-clawed crayfish and the red squirrel.

**Long-term deliver strategy (LTDS).** A document that brings together water companies' enhancement activities into a consistent 25-year strategy. Water company business plans for 2025 to 2030 should be set within the context of the LTDS.

**Market Operator Services Ltd (MOSL).** Market operator for the non-household water retail market in England. MOSL is responsible for the day-to-day running of the retail market, enabling new companies to enter the market, companies to switch and settlement to take place. It also ensures that market entrants are held to account for their performance in delivering the best possible services to business customers.

**Max-Diff analysis.** A survey-based research technique used to quantify preferences. A Max-Diff question shows respondents a list of items and asks them to choose what is most and least important. When the results are displayed, each item is scored, indicating the order of preference.

**Multi-criteria analysis (MCA).** A decision-making framework suited to solving problems with many alternative courses of action. It measures different variables such as costs, efficiency savings and costs impacts. It allows both qualitative and quantitative data to be considered.

**National Infrastructure Commission (NIC).** The body that provides expert, impartial advice to the UK Government on infrastructure. Its role is to shape and develop the national infrastructure assessment.

**Net present value (NPV).** The difference between the present value of cash inflows and the present value of cash outflows over a period of time. It is used in capital budgeting and investment planning to analyse the profitability of a projected investment or project.

**New appointment and variation (NAV).** Limited companies that provide water and/or sewerage services to customers in a specific geographic area previously supplied by the incumbent water only or water and sewerage provider. NAVs are appointed by the regulator Ofwat.

**Ofwat (the Water Services Regulation Authority).** The economic regulator of the water sector in England and Wales. Its duties are to: protect the interests of consumers; secure the long-term resilience of water supply and wastewater systems; and ensure that companies carry out their functions and are able to finance them. Ofwat is independent of government, but is accountable to Parliament.

**Per capita consumption (PCC).** A measure of the daily volume of water required by one person. It includes different types of water use, including domestic, industrial, commercial and public.

**Performance commitment levels (PCLs).** Metrics Ofwat uses to measure the service that water companies deliver for customers and the environment. They measure the levels of service companies commit to deliver and are linked to corresponding incentives to achieve these levels of performance over a specified time frame.

**Prescribed Concentration Value (PCV).** A legal threshold for acceptable levels of contamination in drinking water.

**Price control deliverable (PCD).** The outcomes or outputs expected to be delivered from enhancement related expenditure. They also specify expected delivery timings, reporting and assurance arrangements, and the payments to customers if the enhancement is not delivered.

**Priority Services Register (PSR).** A free service for customers who may need extra help because of medical, learning or physical disabilities, or because of financial difficulties.

**Prompt Payment Code (PPC).** The Prompt Payment Code is a voluntary code of practice that sets standards for payment practices between organisations of any size and their suppliers.

**Public Interest Commitment (PIC).** In 2019 Water UK launched its PIC to reinforce the social contract that exists between water companies, as suppliers of an essential public service, and their customers. Within the PIC are five goals for the water sector to deliver by 2030, including tripling levels of leakage reduction, making water bills affordable for all and achieve net zero operational carbon emissions.

**Regulators' Alliance for Progressing Infrastructure Development (RAPID).** Comprises Ofwat the Environment Agency and the Drinking water Inspectorate. Aim is to help accelerate the development of new national water resources infrastructure and design new regulatory frameworks

**Rapid gravity filters (RGFs).** A type of filter used in water purification. They are commonly used as part of a multiple stage treatment system and can be used to remove turbidity, algae, iron and manganese from raw waters.

**Regulatory capital value (RCV).** A measure of the company's market value plus the value of accumulated capital at each five-year review of price controls. The RCV is a tool to ensure the recovery of the invested capital, including an appropriate rate of return to investors, over the lifetime of the assets.

**Return on regulated equity (RORE).** The returns (after tax and interest) that water companies have earned by reference to the notional regulated equity, where regulatory equity is calculated from the regulatory capital value (RCV) and notional net debt (62.5% of RCV).

**Self-lay provider (SLP).** For developments that require new water mains or sewers, the developer can either ask the water company to install the pipework or it can choose another contractor to do the work. These contractors are known as 'self-lay providers'.

**Site of Special Scientific Interest (SSSI).** A conservation designation denoting a protected area of land. An SSSI can be made on any area of land which is considered to be of special interest because of its flora, fauna, geological or geomorphological features.

**Totex.** Total expenditure. A totex approach considers expenditure in a holistic way: it looks at total expenditure rather than separate operational and capital allowances, enabling a rounded view of spending and investment needs over time.

**UK Customer Satisfaction Index (UKSCI)**. The national barometer of customer satisfaction published twice a year by the Institute of Customer Service (ICS). It is an independent, objective benchmark of customer satisfaction on a consistent set of measures across 13 different sectors. It provides a way to track and compare customer satisfaction performance across the UK economy.

**UK Water Industry Research (UKWIR).** The collaborative research body for the UK. It helps to shape and facilitate the sector's research agenda, develops research programmes and disseminates findings.

**Water Framework Directive (WFD).** Legislation setting out the rules to halt deterioration in the status of EU water bodies and achieve good status for Europe's rivers, lakes and groundwater. The WFD still applies to the UK through the Water Environment (Water Framework Directive) (England and Wales) Regulations 2017.

**Water resources management plan (WRMP).** Sets out how water companies intend to achieve a secure water supply for customers and a protected and enhanced environment over a 25-year timeframe. Companies are required under the Water Industry Act 1991 to prepare a WRMP at least every five years and review it each year.

**Water supply zone.** A geographic designation to manage the supply and demand for water in a particular area.

**Water UK**. The trade association for UK water companies. It works with water companies to ensure customers receive high-quality tap water at an affordable price, and that the environment is protected and improved.

# List of main PR24 documents and appendices

Below, we set out a list of the principal PR24 documents and appendices submitted to Ofwat and published on our website. A comprehensive list of the customer insight and research documents underpinning this business plan is set out in the following chapter.

| Ofwat file reference | Document title |
|---|---|
| SSC01 | Securing your water future – business plan 2025 to 2030 |
| SSC02 | Looking to the future – long-term delivery strategy 2025 to 2050 |
| SSC03 | Fens reservoir – our approach into AMP8 |
| SSC03a | Fens reservoir costs table |
| SSC04 | PR24 data tables (Excel) |
| SSC04a | PR24 data tables commentary – outcomes |
| SSC04b | PR24 data tables commentary – risk and return |
| SSC04c | PR24 data tables commentary – costs (wholesale) water |
| SSC04d | PR24 data tables commentary – water resources |
| SSC04e | PR24 data tables commentary – retail |
| SSC04f | PR24 data tables commentary – developer services |
| SSC04g | PR24 data tables commentary – long-term strategies |
| SSC04h | PR24 data tables commentary – supplementary tables |
| SSC04i | PR24 data tables commentary – summary tables |
| SSC04j | PR24 data tables commentary – past delivery |
| SSC05 | Integrated resilience framework |
| SSC06 | Bidding framework |
| SSC07 | Customer engagement strategy and key insights |
| SSC08 | PR24 technical triangulation – phase 1 methodology |
| SSC09 | PR24 technical triangulation – phase 2 results |
| SSC10 | PR24 technical triangulation- application of the Delphi method |
| SSC11 | Thematic analysis report |
| SSC12 | PR24 stakeholder and customer segment analysis |
| SSC13 | Demographics report |
| SSC14 | SIA assurance report |
| SSC15 | Your water, your say: you said, we did |
| SSC16 | Vulnerability strategy – help when you need it |
| SSC17 | South Staffs Water: estimates of water poverty |
| SSC18 | Our approach to PCC targets and the impact of the COVID-19 pandemic |
| SSC18a | Skewb: Covid impact report |
| SSC18b | Artesia: Impact of Covid19 on consumption |
| SSC18c | Frontier Economics: Impact of Covid19 on the water sector |
| SSC19 | Base cost assessment factors, including real price effects and topography claim update |

| Ofwat file reference | Document title |
|---|---|
| SSC19a | KPMG: Treatment of energy costs in base models |
| SSC19b | KPMG: Real price effects at PR24 |
| SSC19c | First Economics: Input price inflation |
| SSC19d | SSC topography cost adjustment claim |
| SSC19e | Cornwall Insight: Energy market report |
| SSC19f | WRC: APH and boosters per length report |
| SSC19g | Table CW2 post RPE frontier shift efficiency |
| SSC19h | Additional data request energy costs SSC |
| SSC19i | Energy price data analysis SSC |
| SSC20 | Outcome delivery incentives risk range |
| SSC20a | Oxera review of PR19 performance commitments with proposed PR24 ODI rates |
| SSC21 | Jacobs scope of assurance and report |
| SSC22 | Appendix no longer required at submission |
| SSC23 | Appendix no longer required at submission |
| SSC24 | Appendix no longer required at submission |
| SSC25 | Appendix no longer required at submission |
| SSC26 | Initial commentary of the balance sheet cost of debt model and implications for the cost of embedded debt |
| SSC27 | Appendix no longer required at submission |
| SSC28 | PR24 company-specific adjustment to allowed cost of debt |
| SSC29 | Estimating the cost of equity for PR24 |
| SSC30 | Chandler KBS: Tax assurance and methodology report |
| SSC31 | Independent Stakeholder Challenge Panel report |
| SSC32 | Long-term delivery strategy climate change impacts on raw water quality technical report |
| SSC33 | Impact: SSC LTDS triangulation report |
| SSC34 | South Staffs Water revised draft WRMP24 |
| SSC35 | Cambridge Water revised draft WRMP24 |
| SSC36 | Evidencing our enhancement expenditure in 2025 to 2030 |
| SSC37 | Our asset management approach to best value investment planning through 2025 to 2030 and beyond |
| SSC38 | Signposting document for quality and ambition statement |
| SSC39 | WINEP options assessment |

# List of customer research and insight documents

## Below, we set out a list of the reports and wider consultations our independent research partner Impact has used in its triangulation thematic review.

The focus is only on the following research studies, but in our thematic reviews we have drawn on a much wider evidence base including BAU insights from:

- research studies that we have commissioned at PR19 and PR24;
- collaborative research projects jointly commissioned with other water companies that included South Staffordshire Water (SSC) customers in the Cambridge and South Staffs regions; and
- national research studies led by Ofwat and CCW to inform PR24, which included South Staffordshire Water customers.

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| Foundation research qualitative findings – full report (Accent, June 2017) | May to June 2017 | Household (HH) and non-household (NHH) customers | 70 HH, 23 NHH | To understand customer priorities for service delivery, now and over the long term (prompted/unprompted).<br>To check these against previously established priorities at PR14. |
| SSC metering uptake research (QA research, July 2017) | July 2017 | HH and NHH customers | 34 (28 group, 6 in-depth) | To understand the key barriers to customers switching to a water meter.<br>To understand what messages and communication channels would be most effective in encouraging customers to switch to a water meter. |
| WRMP and long-term resilience customer engagement insight – full report (Community Research, September 2017) | Autumn 2017 | HH and NHH customers | Workshops: 62<br>Business and stakeholder roundtables: 21<br>Survey: 200 in CAM (Cambridge region); 300 in SSW (South Staffs region) | To use the research findings from phase 1 to support the development of WRMP19 in both regions.<br>Specifically, to understand customers' views on levels of service, leakage, metering and environmental impact, along with initial thoughts on options for the future.<br>To use the findings from phase 2 to inform investment choices by giving customers the opportunities to feed into our strategic challenges. |
| Willingness to pay research to support PR19 technical report (Impact, June 2018) | October to November 2017 | HH and NHH customers | 1,999 total (1,573 during the main wave and 426 pilot surveys)<br>690 in CAM, 976 n SSW and an additional 333 NHH interviews | To understand customers' willingness and ability to pay for various services and investment levels for water services over the period 2020/25.<br>The research looked specifically at customers' priorities for service investments and the value placed in these investments. |
| Appendix E: customer research findings summary – Cambridge Water WRMP | 2017/18 | HH, NHH and future customers | 7,000+ | To triangulate WRMP19 insights to inform decisions made in the plan |
| SSC appendix A07: PR19 data triangulation study – SSW WRMP | 2017/18 | HH, NHH and future customers | 9,000+ | Appendix for the PR19 triangulation research.<br>A review of all customer engagement activity relating to the WRMPs and focusing largely on customer priorities. |

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| H2Online: summary of activities relevant to WRMP engagement (Explain Research) | November 2019 to July 2023 | H2Online members – CAM/SSW | 360+ in CAM; 315+ in SSW (panel responses vary over time) | To build an engaged community of customers, going beyond insight to establish and sustain two-way engagement.<br>To ensure the PR24 engagement programme delivers a further step change in customer engagement. |
| Tracking customer priorities: desk review report (Accent, September 2020) | August 2020 | Various, covering a wide range of customer and wider citizen segments | Desk research review of 13 reports | To review of our current understanding of our customers' priorities, as reported in our research outputs.<br>To review methodologies for customer priorities measurement, including a review of the research conducted by other water companies for PR19.<br>To review Ofwat's expectations for PR24 as set out in its 'Time to act' strategy document. |
| Priorities research: qualitative insights – year 1 (Accent, October 2020) | October 2020 | HH and NHH customers | c60 in total | To understand customers' uniformed and informed priorities in the short and long term.<br>To understand what factors drive any changes in priorities, including whether there are any water sector trends.<br>To understand whether there have been any changes since summer 2017 and what has driven those changes. |
| Findings from the WRAP (Water Resources Advisory Panel): strategic decisions (Community Research, August 2021) | June to August 2021 | HH, NHH and future customers | 47 in total (28 HH, 10 NHH, 9 future customers) | To explore household, future and SME business customer preferences in terms of environmental ambition, levels of service/resilience ambition and best value planning criteria.<br>To ensure a 'golden thread' of customer preferences in these strategic areas, which sets the context for the remainder of the engagement programme. |
| WRE: club customer engagement final report – combined (Blue Marble, September 2021 | September 2021 | HH and NHH customers<br>Other stakeholders | 20 HH (5 CAM, 5 Essex & Suffolk, 10 Anglian)<br>14 NHH (3 CAM, 3 Essex & Suffolk, 8 Anglian)<br>20 stakeholder organisations across the three companies | To understand consumer context (general environmental priorities, current awareness of long-term challenges and implications for water suppliers).<br>To explore expectations and priorities around environmental planning.<br>To explore responses to the 'best value plan' objectives.<br>To explore options preferences (ranking, preferences and what drives importance).<br>To explore intergenerational economics (response to affordability options to understand generational expectations). |
| Stakeholder roundtable feedback – Cambridge Water (Community Research, October 2021) | October 2021 | Stakeholders (local environmental/ river groups, national env. organisations, a water retailer, a social housing provider, a local authority planning department, a university and an MP) | 18 | To consider stakeholder views at a formative stage of the development process for our plans. |

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| Stakeholder roundtable feedback – South Staffs Water (Community Research, October 2021) | October 2021 | Stakeholders (local authorities, Citizens' Advice, Natural England, Waterwise and sector consumer representatives) | 8 | To consider stakeholder views at a formative stage of the development process for our plans. |
| South Staffs and Cambridge Water: findings from the WRAP (Water Resources Advisory Panel)<br>Deep dives on universal metering and water transfers<br>(Community Research, November 2021) | November 2021 | HH, NHH and future customers | Forum 1: 47 (25 in CAM and 22 in SSW)<br>28 bill payers,<br>9 future customers<br>10 small businesses<br>Forum 2: 40 (20 in CAM, 20 in SSW)<br>26 bill payers<br>6 future customers,<br>8 small businesses | To explore in-depth household customer, future customer and SME business views on universal metering and water transfers. |
| Promoting water efficiency among non-household customers: understanding how wholesalers can motivate usage reduction (Blue Marble, August 2022) | December 2021 to June 2022 | NHH customers | Stage 1 depth interviews: 9 NHH retailers<br>Stage 2 collaborative workshops: 4 NHH retailers<br>Stage 3: 26 NHH customers | To find out water retailers' views and opinions on water efficiency, and on strategies to encourage water efficiency.<br>To develop and refine solutions with retailers and wholesalers.<br>To understand current role of water efficiency – how, if at all, has it been adopted by businesses.<br>To explore barriers to water efficiency – what is, or could be, preventing the adoption of more water efficiency.<br>To develop a proposition response for WRE and how businesses feel about WRE's water efficiency propositions. |
| South Staffs and Cambridge Water – findings from the WRAP (Water Resources Advisory Panel)<br>Focus groups on options relating to metering tariffs and water transfers<br>(Community Research, February 2022) | February 2022 | HH, NHH and future customers | 11 (5 in CAM and 6 in SSW)<br>5 bill payers<br>1 future customer<br>1 small business | To explore the following topics with online groups.<br>• Metering options (both regions).<br>• New types of tariffs/incentives (SSW only).<br>Water transfer options (CAM only). |
| SSC WRMP themes 1 & 3: managing droughts, leakage ambition, universal metering, environmental ambition – quantitative insights (Accent, April 2022) | February to March 2022 | HH and NHH customers | 1,180 in total: 427 in CAM, 753 in SSW (1,028 HH and 152 NHH) | To provide evidence of customer response and support for managing droughts, universal metering, leakage, environmental ambition. |
| SSC WRMP: MDCA – quantitative insights (Accent, March 2021) | December 2022 to March 2022 | HH and NHH customers | 1,015 online interviews (877 HH, 128 NHH): 445 in CAM and 570 in SSW | To explore customers' attitudes and views about the natural environment and our approach to planning.<br>To explore customers' ranking of our water supply options to meet demand over the next 25 years.<br>To explore customers' preferences for WRMP options to obtain weightings for WRW MCDA decision metrics. |

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| Debrief meeting notes – stakeholder roundtable: helping businesses save water (facilitated by SSC) | March 2022 | Stakeholders: universities and local industry | 6 | To work with businesses in our Cambridge region to find out what can be done with retailers to further support, promote and implement NHH water efficiency in the next five years and beyond (challenges, visions, opportunities) |
| Priorities household tracker year 2 quantitative insights (Accent, April 2022) | March 2022 | HH customers | 1,054 (353 in CAM, 701 in SSW) | To provide a benchmark against which customers; priorities will be tracked for both wholesale and retail services.<br>To explore any differences between uninformed/informed priorities and qualitative/ quantitative insights.<br>To understand the customer impact of COVID-19 and, from 2020, the cost-of-living crisis. |
| SSC customer tracking 2021/22 annual report (Turquoise, April 2022) | Rolling monthly survey programme during 2021/22 | HH and NHH customers | 842 HH<br>292 NHH | To monitor ongoing customer satisfaction, deliver ongoing customer sentiment tracking, probe awareness and use of key services. |
| Customer preferences on added value for large resource schemes: literature review on public value of infrastructure investment (Accent, April 2022) | April 2022 | Various, covering a wide range of customer and wider citizen segments | Desk research review of numerous reports relevant to public value research | To understand what types of public value customers perceive are important and preferences among those types (and if preferences change depending of the geographical location/type of scheme or other factors).<br>To understand how much customers are prepared to pay.<br>To understand the language that should be used to explain public value. |
| Priorities research qualitative insights – year 3 (Accent, May 2022) | May 2022 | HH and NHH customers | 32 HH, 12 NHH | To explore what matters to customers now and in the future to root our plans in the customers' world.<br>To understand what customers want and expect us to focus on in the short and long term to 2050.<br>To track and measure any changes in short- and long-term priorities and what is driving these changes. |
| Water Club: changes of source full report (Britainthinks, June 2022) | February to June 2022 | HH and NHH customers | SSC sample within wider club project<br>Qual: 98 HH<br>Quant: 1,762 HH, 198 NHH | To review existing evidence.<br>To identify and fill knowledge gaps about attitudes towards water source change.<br>To provide a clear and actionable framework for water companies to use when communicating water source changes in future. |
| South Staffs and Cambridge Water – findings from the WRAP (Water Resources Advisory Panel)<br>Feedback on draft water resources management plans from the WRAP (Community Research, August 2022) | July 2022 | HH, NHH and future customers | 13 CAM, 13 SSW, 18 bill payers, 2 future customers, 8 SMEs | An online forum with participants designed to gain feedback on latest CAM and SSW draft WRMPs |

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| SRO schemes research: combined insights (Accent/PJM Economics, July 2022) | July 2022 | HH, NHH and future customers | Qual: unknown<br>Quant: 5,902 HH, 533 NHH | To understand what added value customers perceive is important as part of infrastructure development.<br>To understand preferences for the added value – what should be the balance between options such as economy, jobs, apprenticeships, leisure, education, carbon sequestration, etc.<br>To understand how much customers are prepared to pay.<br>To understand what language should be used to explain the added value. |
| WRE triangulation (Impact, August 2023) | Covers research reports from 2019 WRMPs to 2024 WRMPs | Various, covering a wide range of customer and wider citizen and stakeholder segments | Triangulation of 120 pieces of research | To provide a synthesis of recent learnings from all relevant WRE sources to feed into an evidence-based plan that will be effective for the whole region. |
| South Staffs Water WRMP24 acceptability testing wave 1 report (Turquoise, September 2022) | September 2022 | HH, NHH and future customers | HH: 216 CAM, 382 SSW<br>NHH: 20 CAM, 58 SSW<br>Future customers: 17 CAM, 25 SSW | To provide a view of what is driving acceptability and/or a lack of acceptability of our plans.<br>To determine whether customers find the plans in our latest draft WRMPs acceptable.<br>To help us communicate why our plans are acceptable or unacceptable to each region. |
| Garden water usage: understanding behaviour change (Blue Marble, October 2022) | October 2022 | HH customers | 15 (with 3 each from CAM/SSW, South East, Northumbrian, Portsmouth and Southern) | To understand customers' garden water us, specifically to what extent hot weather changes water use and the barriers/drivers towards behavioural change.<br>To develop a tool/messaging to enable customers to change behaviour. |
| Willingness to pay for water services at PR24 (NERA/Qa research, December 2022) | July to October 2022 | HH and NHH customers | 1,250 HH (424 in CAM, 833 in SSW, 91 future bill payers, of which 37 were from CAM and 54 from SSW)<br>247 NHH | Aimed at designing, implementing and analysing a stated preference survey to gain an estimate of customer WTP for service improvements, with the overall aim of informing the PR24 business plan.<br>HH, NHH and future customers were of specific focus. |
| Outcome delivery incentive research: main survey fieldwork (Accent/PJM Economics, June 2023) | July to September 2022 | HH and NHH customers | SSC customers surveyed within the national sample<br>807 in total<br>609 HH (205 in CAM, 404 in SSW)<br>198 NHH (43 in CAM, 155 in SSW)<br>315 vulnerable customers | Aimed at analysing CAM/SSW customer values on top of previous collaborative research by Ofwat and CCW. |

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| Collaborative ODI research: segmentation analysis of South Staffs and Cambridge Water results (Accent/PJM Economics) | March 2023 | HH and NHH customers | Covers additional analysis of the SSC customers surveyed within the national sample<br>807 in total<br>609 HH (205 in CAM, 404 in SSW)<br>198 NHH (43 in CAM, 155 in SSW)<br>315 vulnerable customers | Aimed at analysing further segmentation of CAM/SSW customer values on top of previous collaborative ODI research by Ofwat and CCW. |
| WRW regional plan customer research (Shed Research Consulting, April 2023 | Covers research reports from 2019 WRMPs to 2024 WRMPs | Various, covering a wide range of customer and wider citizen and stakeholder segments | Triangulation of 120 pieces of research | In March 2021 Shed conducted a thematic triangulation of all customer research from WRW companies, mainly from PR19 and WRMP19 research. This gave us a robust insight into customers' views before the COVID-19 pandemic.<br>A similar exercise was completed in May 2022, based on the latest research and including customer and stakeholder research relating to the COVID-19 pandemic, COP26, coverage of storm overflows, and the cost-of-living crisis.<br>To make sure input into the regional plan is based on the most up-to-date research, another triangulation of the latest research was conducted in March 2023. |
| SSC customer tracking 2022/23 annual report (Turquoise, April 2023) | Rolling monthly survey programme during 2022/23 | HH and NHH customers | 1,134 in total<br>837 HH (268 in CAM, 569 in SSW)<br>297 NHH (93 in CAM. 204 in SSW) | To monitor ongoing customer satisfaction, deliver ongoing customer sentiment tracking, probe awareness and use of key services. |
| Priorities research quantitative insights – year 3 (Accent, May 2023) | Quant research: 2022/23, rolling quarterly fieldwork<br>Priorities explored through a Max-Diff study conducted online with SSC customers | HH customers | 2021: 511<br>2022: 1,054<br>2023: 1,072 | To provide a benchmark against which customers' priorities will be tracked both for wholesale and retail services.<br>To explore any differences between uniformed/ informed priorities and qualitative/quantitative insights.<br>To understand the impact on customers of the cost-of-living crisis. |
| SSC company-specific adjustment research – PR24 (Impact, September 2023) | February to April 2023 | HH and NHH customers | Qual: 43 via 6 focus groups, 10 in-depth HH interviews and 4 NHH interviews<br>Quant: 1,314 HH, 149 NHH | To gather insight into customer WTP and acceptance of our company-specific adjustment plans.<br>To understand the main supporting/opposing factors towards these plans. |
| CCW Water Matters: Household customers' views on their water and sewerage services 2023 (DJS Research. April 2023) | June 2022 to January 2023 | HH customers | SSC customers within national sample<br>150 CAM, 150 SSW | Every year since 2006, the Water Matters survey has asked a representative sample of water bill payers from households in England and Wales for their views and experiences of their water, sewerage services, and related charges. |

| Report | Fieldwork date/ insights gathered | Participants | Sample size | Project objectives |
|---|---|---|---|---|
| SSC PR24 LTDS research presentation (Turquoise, July 2023) | January to April 2023 | HH, NHH and future customers | Qual: 34 HH, 12 NHH, 6 future customers<br>Quant: 980 HH (inc. 82 future customers), 100 NHH | To understand customers' attitudes and perceptions towards our long-term vision to 2050 and their spontaneous preferences in terms of long-term delivery.<br>To explore our performance and future targets in ten key ambition areas.<br>To understand the main reasons that drive customer preferences.<br>To explore the issue of intergenerational fairness. |
| SSC social tariffs research 2023 (Qa Research, September 2023) | July to August 2023 | HH customers and stakeholders | Qual: 6 stakeholders in online in-depth interviews, 24 HH in online groups, 28 HH in in-person workshops<br>Quant: 1,238 HH direct survey completes, 130 HH panel completes, 99 F2F completes with vulnerable HH, 23 PSR survey completes, and 21 H2Online community survey completes | To engage with consumers about the future development of the Assure tariff.<br>To establish customer views towards a possible new affordability tariff aimed at those struggling to pay their water bills, but who do not qualify for Assure because their income is too high. |
| SSC PR24 affordability and acceptability testing – quantitative findings (Accent, 2023) | August to September 2023 | HH and NHH customers | 987 HH<br>117 NHH | Mandated survey to provide views on the affordability and acceptability of our business plan. |

We have also received specific feedback from the following stakeholders on the latest draft WRMPs for our Cambridge and South Staffs regions, and also on our water efficiency in diverse and faith cultures project.

- Arqiva.
- Cambridge and South Cambridgeshire Green Party.
- Cambridge City Council/South Cambridgeshire District Council.
- Cambridgeshire County Council.
- Cambridge University.
- Cam Valley Forum.
- CCW.
- Defra.
- Environment Agency.
- HCT.
- Historic England.
- MOSL.
- National Trust.
- Natural England.
- NFU.
- Ofwat.
- Waterscan.
- Waterwise.
- WRE.
- WRW.

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