



SSC05 Integrated resilience framework

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1. Introduction

At PR19 we embraced Ofwat's move to ensuring sector was resilient 'in the round' when delivering services to customers.

To us this means ensuring we have:

- **financial resilience**, which is about our ability to avoid, cope with and recover from any disruption to our finances now and over the long term;
- **corporate resilience**, which is the ability of our governance, accountability and assurance processes to avoid, cope with and recover from disruption of all types, and to anticipate trends and the variability of our business operations; and
- **operational resilience**, which is the ability of our infrastructure – and the skills needed to operate that infrastructure – to avoid, cope with and recover from any disruption to any aspect of our performance and ensure we continue to deliver the secure and reliable water supplies our customers expect.

We believe we are one of few companies who delivered on our resilience action plan and have transparently reported our progress against the ambition we set at PR19. We have considered all aspects resilience in our planning and decision making and see merit in continuing this approach for PR24.

This planning period has not been without significant challenges for us, across all areas of resilience, this coupled with our ambition for continual improvement has led us to review our resilience action plan. We have reflected the challenges we have seen as company, together with increased scrutiny the sector is now rightly under, in our thinking when assessing maturity.

This document builds on our PR19 approach, which we consider has served us well, and is now embedded in our internal governance processes, and sets out how we have further developed our integrated, systems-based approach to ensure we can continue to deliver resilient services to customers now and over the long term.

It is important to us that we maintain the clear line of sight we have delivered across the planning period between our resilience action plan and corporate, into departmental and personal objectives. And ensure that we embed the concept of resilience in the round in all our business-as-usual activities. This, of course, means we now need to ensure our resilience action plan is aligned to our newly developed long-term delivery strategy (LTDS). In developing our approach, we have drawn on best practice and learnings from across the sector.

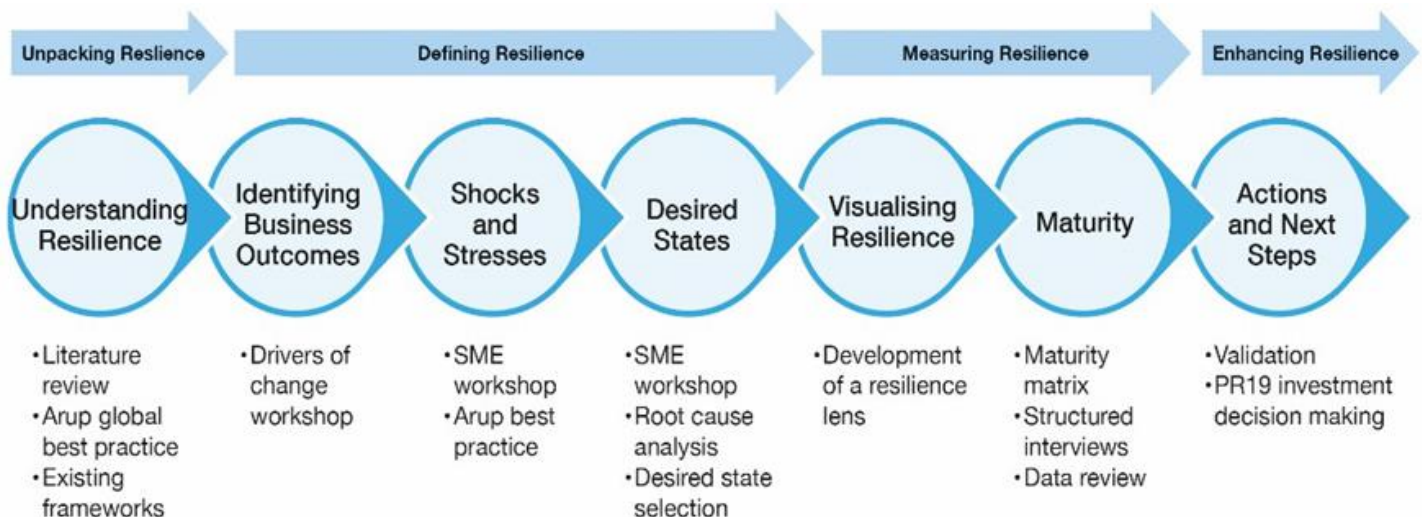
2. Updating our approach

When we developed our integrated, systems-based approach to resilience in the round, we worked collaboratively with industry experts, Arup.

This is because we recognised that we needed to incorporate a resilience perspective in our planning, both for the business planning process for the 2019 price review (PR19) and for the longer term. Our starting point for this work was Ofwat’s definition of **resilience**¹, which is that:

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

Working closely with Arup, we used the following process to develop a framework that would enable us to deliver financial, corporate and operational resilience.



Source: ‘South Staffordshire Water Resilience Status Report’, Arup, May 2017.

We have stayed true to this process in producing both our updated view on defining what resilience means for us, our environment and our customers.

2.1 Identifying business ambition

The step change for us at PR24 in evidencing resilience is at the heart of decision making, was to ensure alignment across our LTDS and our resilience action plan. In our LTDS doc ref appendix, we unpack how we collectively across the business defined our ambition statements, for five key areas of our business.

Whilst we did not constrain our thinking by our original action plan, the five ambition statements that we developed for our LTDS can be mapped across to original plan, so we can show continuity in improvement over both planning periods. This work allows us to show the build from our original PR19 plan where we identified our key business outcomes.

¹ ‘Resilience Task and Finish Group: Final report’, Ofwat, December 2015. www.ofwat.gov.uk/publication/resilience-task-and-finish-group-final-report/

	<p>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.</p>
	<p>Our environment We will lead in protecting and enhancing the environment – working with partners to ensure sustainable water supplies and flourishing local habitats.</p>
	<p>Our customers We will innovate to exceed customers’ expectations of our service, end water poverty and make sure help is always available.</p>
	<p>Our communities We will use partnerships and education to lift our communities, creating space and opportunities to help people work and thrive.</p>
	<p>Our business We will lead in adapting to climate change and will run a safe, efficient and sustainable business, with a highly-skilled workforce.</p>

2.2 Shock and stresses

As part of our update we reviewed and challenged the shocks and stresses that could affect our ability to deliver our key outcomes and therefore deliver on our ambition statements in the longer term.

These represent the biggest challenges to us as a business. Again, we used workshops and interviews with key internal and external stakeholders to help us understand the root causes of each of the shocks and stresses we identified, along with any mitigation measures we might need to put in place. The main shocks and stresses we identified are set out below.

Shocks	Stresses
Extreme weather event	Reduced water resource yield because of climate change
Unprecedented peak demand	Market competition
Failure of critical assets	Political and economic uncertainty
Failure of critical systems	Increased demand
Raw water source compromised	Deterioration of raw water quality
Deliberate attack	Poor asset condition
Regulatory change	More difficult regulatory requirements
Regulatory breach	Increase in cost of supply
Lack of workforce skills and knowledge	Workforce culture
Global Pandemic	Loss of customer trust and goodwill

2.3 Desired states

We used this list of shocks and stresses to influence the development of a number of ‘desired states’.

These are the statements that we consider reflect a resilient business – that is, they reflect the characteristics that enable us to mitigate and bounce back so that we can continue to deliver the levels of service our customers always expect. We used a robust approach to develop our desired states, focusing our attention on what good would look like.

Below we set out each desired state, how they align to our long term ambition in our LTDS and a brief description of what it means for our business.

Ambition statement	Desired state	What it means for us in terms of resilience
Our service	Safeguarding excellent water quality through the distribution system to customers’ taps that meets statutory obligations around compliance targets for both our potable water supply and in our discharge to the environment	These desired states emphasise the importance of preserving water quality while it is in the distribution network and having the flexibility to be able to move water around quickly and efficiently. A resilient business will be confident that customers are either satisfied with, or do not notice changes in their water, and that they will always be able to turn on the tap and receive clean, high-quality water supplies. This state also reflects the governance and monitoring we have in place around specific water quality risk across our asset base, and the cross-business alignment to ensure we have a clearly understood risk repository that is linked to our investment planning process
	Reliability: a consistent supply that can withstand events	This is about making sure that demand for water is always met as a resilient business will have a reliable, well-maintained asset base.
	Flexibility: the ability to reconfigure and operate system in different ways	This describes the degree of flexibility needed to reconfigure the system to respond to events. A resilient business will have a number of options available, and will be able to withstand events and be flexible enough to respond quickly.
	Diversity: system is designed to have a variety of unconnected sources and routes to customers	This is about the diversity of the water supplies available. A resilient business will have a range of different, unconnected water sources, such as rivers and groundwater, each of which will have a different level of response to drought, heavy rainfall or pollution. It will also be able to satisfy demand from a different combination of these water sources.
Our environment	Understand/able to influence catchment activities, including early warning of raw water quality	This is about understanding major risks within water catchments. A resilient business will have strong communication links with landowners and land users to influence catchment use and to get early warning of any potential deterioration in raw water quality. Mitigations could include temporarily using alternative supplies or making use of additional treatment processes, for example.
	Ensure a sustainable and resilient supply of water that meets the needs of our customers and our environment	This desired state focuses on the intrinsic balance between delivering the water supply needs of our customers, particularly in the face of significant development, with the needs of our environment. We must ensure we can deliver this in a resilient and sustainable way that deliver best value to both. This will be a long term focus that aligns with Government objectives and focuses on reducing demand and delivering more sustainable sources of water.
	Active and formalised carbon management strategy to account for and minimise carbon emissions	This desired state is about minimising carbon emissions in line with national targets and international goals. A resilient business will have a mature and well-developed in-depth understanding of both operational and embedded carbon with a comprehensive reduction plan in place that is used in decision making and to drive behaviours.
	Low levels of leakage generally, and especially responsive to visible leaks	This is about the informal contract that exists between company and customers to reduce leakage. A resilient business will have low levels of actual visible leakage, but will also respond quickly to reports from customers about water wastage.
	Ensure sector leading demand management	This is about ensuring we are ready and able to deliver on the Environment Act targets
Our customers and our communities	Company has appropriate programme in place for customer education and behavioural change	This reflects the importance of educating future generations about the need to use water wisely. A resilient business will have education programmes can help to encourage current and future customers to understand the impact they have on the environment when they use water and encourage them to respond to messages about changing behaviours.

Ambition statement	Desired state	What it means for us in terms of resilience
	Excellent insight and communication with customers and communities	These desired states are essential for enabling customer interaction and for understanding so we can communicate clearly and ensure we are meeting customer needs. Having an understanding of the “golden threads” that drive customers’ preferences and how these change over time is vital to ensure strategic plans shift over time to ensure services, support and communications are resilient to changes. They are also about understanding customers’ ability to pay their bills. A resilient business will be embedded within the communities it serves and understand who its customers are. It will also be able to respond to their needs in a way that recognises those customers as individuals and one that recognises that different communities may have different priorities from their water service to reflect local challenges. From support customer to pay, to ensuring their supply queries are resolved, it is critical that we maintain a high level of service, tailored to individual customer circumstances.
	A resilient business is able to provide extra help to customers that need it, supporting customers with clear messaging and adapting our service where required e.g. during a supply incident.	
Our business	A financeable business understanding robust stress tests	This is about being financeable over the long term. A resilient business will consider its financial viability over the long term and be able to maximise the stability of its returns to investors at an appropriate value.
	Advanced knowledge of potential regulation changes	These desired states relate to the changing environment in which the water companies operate. A resilient business will understand and be able to react quickly to changing political or regulatory circumstances. In addition to this, is a business is on the front foot of sector change, it can then anticipate change and innovate.
	Proactive sector shaper	
	A mature approach to security	This is about having a well-developed approach to security. A resilient business will have a mature approach to physical and personal security, and also to the rapidly emerging threat of cyber-attacks. It will also employ the five layer approach of identify, protect, detect, respond and recover.
	Safe working environment and culture	This is about the safety, health and wellbeing of our employees. A resilient business understands the presence of capacity to manage critical risk in variable conditions, with a deep understanding of how work is delivered successfully. . We learn and improve from both success and failure with a mindset of continuous improvement. We understand that safety is an emergent property of work done well and that success requires and harnessing the dynamics between systems and people through; leadership responsibility; human performance states; training to ensure competence at all levels; learning pro-actively; investigating on potential outcomes; providing equipment; and performance monitoring.

We signalled at PR19 that our view on the ‘desired states’ it should be noted that the desired states reflected the current challenges facing we were facing at the time and that they were likely to evolve over time.

We have:

- challenged our view on what mature security looks like, and built on our learnings from the cyber-attack we experienced in 2022 – increasing the requirements that we consider define a mature organisation, reflecting the requirements from NIS and CAF;
- increased the requirements for a resilient business in our desired state covering affordability to include the need for business to ensure they recognise customers as individuals, rather than a one size fits all approach;
- increased the number of desired states that cover our environmental ambition – recognises that at PR19 we hadn’t fully covered our role as environmental stewards in our assessment;
- recognised the importance of wellbeing within our teams and bolstered the requirements in our desired state for health and safety; and
- reflected the importance of supporting our customers with increased understanding on the effects that their behaviours can have on the environment through our increased educational activities.

2.4 The resilience lens

The resilience lens we developed at PR19 has become a key tool for us throughout the planning period, and is now embedded in a systems based thinking approach. For PR24 we have updated to ensure alignment to LTDS and an updates to the desired states discussed in the section above.

The resilience lens comprises the following four elements.

- The **three factors that Ofwat considers makes a business resilient in the round** – financial resilience, corporate resilience and operational resilience.
- The **overarching business ambitions as identified in our LTDS**. These broadly align with the promises we have made to our customers over the period 2020 to 2025 and the performance commitments that underpin these promises therefore enables us to have a continuity when tracking improvements across both planning periods.
- The **desired states** that we consider reflects a resilient business.
- **Scoring that enables us to assess our resilience maturity** against the desired states.

We illustrate our resilience lens below.

Operational resilience					
Our service		Our environment		Our customers	Our communities
Excellent water quality Now End AMP8		Environmental responsibility Now End AMP8		Customer experience Now End AMP8	
Understand/able to influence catchment activities, including early warning of raw water quality deterioration 2 3		Company has appropriate programme in place for customer education and behavioural change 2 3		Excellent insight and communication with customers and communities 3 4	
Safeguarding excellent water quality through the distribution system to customers' taps 2 3		Active and formalised carbon management strategy to account for and minimise carbon emissions 2 3		High levels of trust and an affordable service for all 2 4	
Secure and reliable supplies		Low levels of leakage generally, and especially responsive to visible leaks 3 4		Excellent customer service 2 3	
Reliability: consistent supply that can withstand events 3 4		Sector-leading demand management 2 3			
Flexibility: the ability to reconfigure and operate system in different ways 2 3					
Diversity: system is designed to have a variety of unconnected sources and routes to customers 2 3					
Corporate resilience		Financial resilience		<p>Scores represent where we think our projected maturity matrix scores will be by 2030.</p> <ol style="list-style-type: none"> 1 Limited application. Where we have not yet demonstrated resilient working, but are considering it for the future. 2 Low level of maturity. Where we understand resilient working, but only apply it within isolated cases. 3 Medium level of maturity. Where we demonstrate an understanding of resilient and can demonstrate its adoption within most of our activities. 4 High level of maturity. Where we fully integrate resilient working into all our operational processes. 	
Our business					
Anticipating future evolution Now End AMP8		Long-term financeability Now End AMP8			
Advance knowledge of potential regulatory changes 3 4		A financeable business understanding robust stress tests 3 4			
Proactive sector shaper 3 4					
Health, safety and security					
A mature approach to security 2 3					
A safe working environment and culture 3 4					

2.5 Measuring our resilience maturity

As at PR19, our ambition remains to enhance our resilience through targeted investment in PR24 and in subsequent price reviews. To enable us to do this, we have to understand where we are currently in terms of our resilience and identify those areas where we need to improve.

At PR19 we worked with Arup to develop a maturity matrix, which we have used and reported our progress against in our APR submissions. As the process is now embedded within the business we held a number of workshops to review the maturity matrix, and ensure that it reflects the progress the sector has made in a number of key areas. We then, building on our APR23 submission, and our redefined maturity levels, have given each maturity level a score of one to four – where one is where we have not yet demonstrated resilient working and need to improve; and four reflects a high level of resilience maturity. Please see appendix 1 for our complete maturity matrix.

3. Resilience action plan

In developing this action plan, we have identified a number of schemes and activities from our business plan for 2025 to 2030 and our wider business that we consider contribute to our overall resilience.

It should be noted that our ability to implement this plan in full is subject to Ofwat’s final determination of our business plan.

Ambition statement	Business outcome	Desired state	Action	Status	Complete Date	Commentary
Our service	Excellent water quality	Understand/able to influence catchment activities, including early warning of raw water quality deterioration	Expand our SPRING environmental protection scheme to include a further three groundwater catchments covering 15 sites from where we take water	In progress	31 March 2025	We will expand the scope of our well-established SPRING environmental protection scheme over the five years from 2020 to 2025 (AMP7)
			Prevent deterioration in the quality of water sources from where we take our drinking water – evaluating up to 50 sites	In progress	31 March 2025	Our catchment management programme to prevent raw water deterioration is well established. We will expand the number of sites this covers during AMP7
			Deliver a comprehensive river restoration scheme across seven chalk stream rivers in the Cambridge region.	In progress	31 March 2035	We will deliver a multi-AMP programme of work through our WINEP programme that will look at restoring the natural condition of chalk stream rivers, thereby restoring and protecting them for the future.
		Safeguarding excellent water quality through the distribution system to customers’ taps	Improve nitrate treatment at a key source station, Morden Grange in our Cambridge region	In progress	Timescales have been agreed with the DWI for delivery and regulatory notices put in where applicable	This work is supported by a DWI notice issued in September 2023

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Ambition statement	Business outcome	Desired state	Action	Status	Complete Date	Commentary
			Investment to address deteriorating raw water quality associated with Antimony and Manganese in our South Staffordshire region, at Fradley and Bourne Vale source stations respectively. The latter also includes for strategic distribution mains cleaning activity in our Sutton Coldfield supply zone.	In progress	Timescales have been agreed with the DWI for delivery and regulatory notices put in where applicable	This work is supported by a DWI notice issued in September 2023
	Secure and reliable supplies	Reliability: a consistent supply that can withstand events	Rebuild of Barr Beacon No.1 service reservoir, a strategic storage asset within our South Staffordshire area	Mar 2025 – phasing tbc	31 March 2030	This work is funded partly through our base capital programme and partly through our enhancement programme on the basis we are increasing the storage capacity of the existing reservoir with the proposed solution
Rebuild and upsize of Langley service reservoir, a strategic storage asset within our Staffordshire area			Mar 2025 – phasing tbc	31 March 2030		
£6m programme of Cambridge production base capital maintenance at source and booster stations and c£10m net investment at our two Treatment Works			Mar 2025 – phasing tbc	31 March 2030	-	
Network resilience schemes to ensure customers supplies are maintained			Mar 2025 – phasing tbc	31 March 2030	Network resilience schemes to ensure customers supplies are maintained	
Resilient to 1:500 year drought			Mar 2025 – phasing tbc	31 March 2030		
		Flexibility: the ability to reconfigure and operate system in different ways	Further developments of our SCADA system	Mar 2025 – phasing tbc	31 March 2030	Work continues to replace our regional SCADA systems. Completion has been moved back following Covid and the 2022 cyber-attack and is now expected March 2024.
			Continue to improve our AMMA – building on the significant work carried out this AMP utilising software like Copperleaf		On-going	Optimisation in period to ensure a flexible approach to investment planning

Ambition statement	Business outcome	Desired state	Action	Status	Complete Date	Commentary
		Diversity: system is designed to have a variety of unconnected sources and routes to customers	Developing the Grafham transfer		2032	
Our environment	Environmental responsibility	Company has appropriate programme in place for customer education and behavioural change				
		Active and formalised carbon management strategy to account for and minimise carbon emissions	Reduce our carbon footprint from source to tap, coupling the latest low carbon treatment technologies with well establish renewable energy sources. Our dedication and commitment to achieving NETZERO by 2030 will see our business deliver a myriad of projects ranging from responsibly sourcing our electricity supply with guaranteed renewable origin to harnessing nature-based solutions such as recycle and harvest water schemes.	In progress	31 March 2025	
		Low levels of leakage generally, and especially responsive to visible leaks				
		Sector leading demand management	Low meter penetration across the customer base No comms regarding water efficiency Disinterested and un-informed customer base	Commencing universal smart metering programme Regular customer comms regarding water efficiency	Universal smart metering in delivery Regular and relevant feedback to customers regarding water usage	Universal smart metering for all customers Highly targeted and segmented customer engagement Tariffs linked to water usage Fully engaged and informed customer base

Ambition statement	Business outcome	Desired state	Action	Status	Complete Date	Commentary
Our customers and our communities	Customer experience	Excellent insight and communication with customers and communities	<p>Continue, including our Young Innovators' Panel (YIP).</p> <p>Continued shift towards embedding 2-way customer engagement into business operations – such as forming an on-going Citizens' Jury to challenge the delivery of our Net Zero carbon plans and our Water Resources Advisory Panel (WRAP).</p> <p>These approaches will ensure customers' preferences continually shape or plans and help to co-develop the implementation.</p>	In progress	Ongoing	<p>Between Summer 2021 to Summer 2022 our WRAP inputted into and challenged the development of our WRMP24 plans and many are keen to continue engagement.</p> <p>In Summer 2023 we run our first Net Zero Citizens' Jury to help shape and challenge our strategy for delivering our Net Zero targets.</p> <p>We also ran our latest SSW Young Innovator's Panel where 25 students worked in 4 teams to create interactive games (APP and board games) to be used as ways of developing Key Stage 3 content for our secondary schools engagement programme.</p>
			Continue to build engagement on our H2Online community panel to track customer priorities and give us regular insight across a range of topics – from improving reports and campaigns to drive increased engagement and review policy decisions and test new services.	In progress	Ongoing	H2Online has provided us with a valuable communication channel, where we can test more challenging topics with an engaged customer base
		High levels of trust and affordable service for all	Ensure we provide extra help to customers who may be in vulnerable circumstances	In progress	Ongoing	Developing a detailed Vulnerability and Affordability strategy as part of a Help When You Need It Programme, tailoring our service to customers who may need additional support, whether that be during a supply incident or to pay a bill/communicate with us
			Build a customer trust recovery plan – reflecting not only on our own challenges regarding the cyber criminal attack, but also sector level challenge	In progress	Ongoing	
		Delivery of excellent service	Ensure we provide extra help to customers who may be in vulnerable circumstances	In progress	Ongoing	Developing a detailed Vulnerability and Affordability strategy as part of a Help When You Need It Programme, tailoring our service to customers who may need additional support, whether that be during a supply incident or to pay a bill / communicate with us

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Ambition statement	Business outcome	Desired state	Action	Status	Complete Date	Commentary
			Enhance and increase our community presence for our customers who choose to engage with us in this way	In progress	Ongoing	Recognising the levels of digital deprivation across our SSW region and enhancing our face to face support to ensure we have customer journeys for all.
			Implement chatbot technology across a number of customer-facing processes	In progress	Ongoing	We are continuing to develop our digital capability as a business as part of our omni channel offering which will include AI analysis to understand and serve our customers better.
			Implement an online portal with self-serve functionality for developers	In progress	December 2019	We have launched a three-phase project to develop and implement an online Developer Services portal. This will give developers (including NAVs) the opportunity to self-serve for quotations and to track applications. This web-based portal will consider options to provide location plans, and links to planning and scheduling, as well as payment options
Our business	Long-term financeability	A financeable business understanding robust stress tests	Commit to demonstrating in our next long-term viability statement that our assessment of financial resilience extends beyond 2030. Our investors are committed to provide equity if needed, dependent on our FD24 settlement	In progress	Ongoing – reported annually	This is an annual commitment, which we report on in our annual performance report (APR)
	Anticipating future evolution	Advance knowledge of potential regulation changes	Continue to build our understanding of how climate change will affect our service offering. Enhance our relationship with our regulators to support regulatory and legislative change where needed.	In progress	31 March 2025	This is to enable us to improve our horizon scanning, and prepare and put in place actions for any future regulatory environmental changes. Noting some of the challenges we have had this planning period and building on the lessons we have learnt to deliver effective and timely change
		Proactive sector shaper	Actively support Ofwat in embracing the opportunity the innovation fund brings the sector	In progress	Ongoing	This is to help us to improve our horizon scanning, understand the level of risk in the new markets and to ensure we are compliant with all relevant competition rules, together with taking advantage of our agility to support the growth of knowledge across the sector

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Ambition statement	Business outcome	Desired state	Action	Status	Complete Date	Commentary
	Health, safety and security	A mature approach to security	Continue to ensure security matters are at the heart of all our decision making, business planning and processes			Cyber security governance has been reviewed and updated following the 2022 cyber-attack and a new Information Security Forum (ISF) established. The ISF will support and implement a programme of information security improvement across South Staffs and Cambridge Water as we continue to work toward meeting the DWI Sector Specific Profile (SSP) targets and comply with the 2018 NIS Regulations.

Annex 1: Resilience action plan

Please note that the shaded areas in the maturity matrix below relate to our view of where we think we will be by 2024/25 and correspond with the scores on the resilience lens.

What we want to achieve	Desired state	Level of maturity			
		1 – Limited application	2 – Low level of maturity	3 – Medium level of maturity	4 – High level of maturity
		Where we have not yet demonstrated resilient working, but are considering it for the future	Where we understand resilient working, but only apply it within isolated cases	Where we demonstrate an understanding of resilience and can demonstrate its adoption within most of our activities	Where we fully integrate resilient working into all our operational processes
Customer experience	Excellent insight and communications with customers and communities	<p>Company has a very limited understanding of customer views and segmentation, and communications are generic and standard.</p> <p>Standard communications technology only.</p> <p>Minimal formal company participation in community.</p>	<p>Company has carried out some detailed customer research and has broad understanding of different customer segments.</p> <p>Communication is targeted to a small degree with some limited community engagement.</p> <p>Minimal use of new technology in limited circumstances.</p> <p>Limited business as usual insight.</p>	<p>Company is informed by some detailed customer research, with segmentation and tailoring of activities to community needs.</p> <p>Community participation is in place with a few local community contacts.</p> <p>New technology is widely used at a generic level.</p> <p>Integrated business as usual insight in decision making.</p>	<p>Company has a robust and well-informed strategy for customer and community engagement, and wide-scale participation and mutually beneficial collaboration based on extensive customer research, segmentation, community contacts and targeted communications.</p> <p>New technology is deployed as normal and targeted to meet customer segmentation preferences.</p> <p>Multi-channel approach that draws on behavioural science techniques to provide an effective customer experience.</p>
	High levels of trust and affordable service for all	<p>Moderate levels of trust and value for money scores on all surveys.</p> <p>Affordable bills.</p>	<p>Moderate levels of trust and value for money scores on all surveys.</p> <p>Affordable bills.</p> <p>Some evidence of segmentation and vulnerable customer engagement.</p>	<p>High levels of trust and value for money scores on all surveys.</p> <p>Affordable bills – future customers fully engaged and future bill levels/scenarios tested.</p> <p>Strong evidence of segmentation and vulnerable customer engagement.</p>	<p>High levels of trust and value for money scores on all surveys.</p> <p>Affordable bills – future customers fully engaged and future bill levels/scenarios tested.</p> <p>Strong evidence of segmentation and vulnerable customer</p>

What we want to achieve	Desired state	Level of maturity			
		1 – Limited application	2 – Low level of maturity	3 – Medium level of maturity	4 – High level of maturity
		Where we have not yet demonstrated resilient working, but are considering it for the future	Where we understand resilient working, but only apply it within isolated cases	Where we demonstrate an understanding of resilience and can demonstrate its adoption within most of our activities	Where we fully integrate resilient working into all our operational processes
				Some evidence of co-creation in decision making.	engagement, including transient vulnerable customers. Strong evidence of co-creation in decision making.
	Delivering excellent service	Lower quartile customer satisfaction performance. Poor customer systems, our people not particularly well trained or knowledgeable. Systems inhibit sense of responsibility and ownership from our people. Poor company culture and morale. 'One size, fits all' service offering, no delineation of offering based on need. Single channel of engagement with customers.	Mid-quartile customer satisfaction performance. Reasonable customer systems, our people are relatively well trained and knowledgeable. Company culture focused on delivering good customer service. Minor modifications to a 'one size, fits all' service offering. A series of conventional channels with little innovation.	Mid- to upper quartile customer satisfaction performance. Reasonably motivated and knowledgeable people, who have some ownership of issues. Customer systems in place are moderately effective. Company culture focused on delivering good customer service. Tailoring of the service offering to customers' generic needs. Limited range of contemporary engagement channels reaching the full breadth of customers.	Top quartile customer satisfaction performance. Effective systems that encourage ownership, responsibility and engagement from across the whole supply chain. Our people are well trained and motivated, with great company culture and morale. Service offering is tailored to customers' specific needs. Extensive range of contemporary engagement channels reaching the full breadth of customers.
Excellent water quality	Understand and able to influence catchment activities, including early warning of raw water quality deterioration	Basic qualitative understanding of existing catchment activities and their impact on water quality. Limited or poor relationships with land users. Manual, interval-based water quality monitoring. Water quality monitors have a limited number of parameters, modest sensitivity and are unreliable. Surface water quality monitoring only.	Good qualitative understanding of existing catchment activities and impact of potential changes in use. Developing relationship with land users. Manual, interval-based water quality monitoring with some limited automated systems. Water quality monitors have a few parameters, modest sensitivity and are fairly reliable. Surface water quality monitoring only.	Good understanding of existing catchment activities and their impact on water quality. Good relationship with land users, with some initiatives in place. Some limited automated responses in place. Modern, reliable, multi-parameter, sensitive online monitoring for surface water. Groundwater quality is considered and basic aquifer monitoring in place.	Good understanding and ability to quantify financial benefits of changed catchment activities. Great relationship with land users and a number of advanced initiatives in place. Automated response to alert. Modern, reliable, multi-parameter, sensitive online monitoring for surface water. Ongoing research into emerging technologies for monitoring.

What we want to achieve	Desired state	Level of maturity			
		1 – Limited application	2 – Low level of maturity	3 – Medium level of maturity	4 – High level of maturity
		Where we have not yet demonstrated resilient working, but are considering it for the future	Where we understand resilient working, but only apply it within isolated cases	Where we demonstrate an understanding of resilience and can demonstrate its adoption within most of our activities	Where we fully integrate resilient working into all our operational processes
				Some limited quantification of financial benefits of changed catchment activities.	Appropriate and selective monitoring of groundwater quality in upstream aquifer.
	Safeguarding excellent water quality through the distribution system to customers' taps	No consideration of risks. No risk assessment or management plan in place. No customer education programme. No plumbosolvency treatment.	Consideration of risk assessment. Management plan in place. Limited customer education programme. Optimised plumbosolvency treatment across all sources. Targeted lead pipe replacement of a small number of the most vulnerable customers.	Consideration of risk assessment. Management plan in place. Targeted customer education programme. Optimised plumbosolvency treatment across all sources. Targeted lead pipe replacement for most vulnerable customers.	Best practice risk assessment. Best practice management plan in place. Leading customer education programme. Optimised plumbosolvency treatment across all sources. Removal of all lead within our supply system. Leading best practice to remove all products that could cause a detriment to water quality from the market.
Secure and reliable supplies	Reliability: a consistent supply that can withstand events	Small disturbances cause major disruptions, high level of unplanned outage and an inconsistent supply/output. Reactive system only, with lots of unexpected variations. Limited asset health measures in place. Poor asset health.	Some understanding of future potential events that could occur, but still reactive. Fairly slow recovery from unexpected events, with each requiring bespoke solutions. Moderate understanding of asset-related risks, with moderate asset health. Minimal understanding of external influences.	Moderate understanding of future potential events, with some limited proactive contingency plans in place. Reasonable recovery from unexpected events. Decent understanding of asset-related risks, good asset health. Reasonable understanding of external influences.	Small disturbances cause little to no disruption, with minimal outage and a consistent supply/output. Proactive operation with well-rehearsed contingency plans in place for a range of potential events and rapid recovery. Comprehensive understanding of asset-related risks, with excellent asset health. Comprehensive understanding of external influences on system with communication/education in place to influence/minimise risk.

What we want to achieve	Desired state	Level of maturity			
		1 – Limited application	2 – Low level of maturity	3 – Medium level of maturity	4 – High level of maturity
		Where we have not yet demonstrated resilient working, but are considering it for the future	Where we understand resilient working, but only apply it within isolated cases	Where we demonstrate an understanding of resilience and can demonstrate its adoption within most of our activities	Where we fully integrate resilient working into all our operational processes
					All customers have an alternative supply.
	Flexibility: the ability to reconfigure and operate system in different ways	Limited scope for reconfiguration of entire supply system in the event of loss of major source. No scope for deployable assets to be taken out of supply. Unknown number of customers reliant on a single source.	Modest ability to reverse flows or reconfigure supply system. Critical assets well defined and can all be taken out for short periods without a noticeable effect. Significant number of customers reliant on a single source.	Large-scale flow reversals possible in key areas. Some scope for reconfiguring the system to release locked-up deployable output. Critical assets are well defined and can be taken out for extended periods with little effect, with plans in place and occasionally exercised. Active programme to gradually reduce customers at risk by reducing the number of customers reliant on a single source.	Highly interconnected network with numerous supply sources and routes to the customer, and the ability to re-zone in the event of a major loss of supply. Control systems allow automatic reconfiguration in near real time. Impacts of network connectivity and flows very well understood. All critical assets can be taken out for significant periods of time and no one is affected at any point throughout the year.
	Diversity: the system is designed to have a variety of unconnected sources and routes to customers	Reliance on few connected major water sources only for majority of supply to all customers. Limited alternative source options. Limited strategic storage. No significant bulk imports.	Reliance on few major water sources for most of the supply to customers. Some alternative source options from other appropriate geographic or source types. Modest strategic storage. Modest volumes of bulk import available.	Reliance on several major water sources for most supplies to customers. Several geographic and appropriate source types available, with considerations of economic and practical implications. Reasonable strategic storage. Reasonably large bulk imports available.	All water supply zones have more than one source of supply available. High degree of diversity in appropriate source types and geographic locations, with robust economic and practical considerations and plans in place. Considerable strategic storage. Well-established trades and bulk imports available, and network routinely tested to manage introduction. No single points of failure in supply system.

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Environmental responsibility	Company has appropriate programmes in place for customer education and behavioural change	Company has few behavioural change initiatives and limited education programmes in place. No formal measurement of value of engagement/education programmes. Little understanding of costs.	Few, small and emerging behavioural change initiatives in place, although benefits are not yet quantified. Costs of delivery are approximate and not allocated to specific activities or initiatives.	Company has a broad strategy for customer education and community engagement, with a few behavioural change initiatives in place. Behavioural change measures are in development, with some benefits being measured. Costs of delivery programmes are understood.	Company has a robust and well-informed strategy for customer education and wide-scale behavioural change. Behavioural change measures are in place and show tangible benefits delivered. Costs of delivery programmes are well understood and prioritised to deliver maximum benefit.
	Active and formalised carbon management strategy to account for and minimise carbon emissions	Carbon is accounted for, but in an unstructured manner with no clear strategy and does not influence any decision making.	Operational carbon is accounted for in a structured manner. Reduction is considered within the company but driven by cost considerations only.	Consistent carbon accounting for all operational and some embodied (embedded) carbon. Carbon reduction plan is applied and is occasionally used in periodic investment decision making only.	In-depth understanding and accounting for both operational and embodied carbon. Consistent and effective carbon accounting process that influences decision-making process on a regular, strategic and tactical basis.
	Low levels of leakage generally, and especially responsive to visible leaks	Lots of visible leakage and a slow response to wastage. Repairs prioritised purely on economics.	Reasonably high level of visible leakage and a relatively slow response time. Public reputation is deemed important, but cost is still preferential.	Relatively low levels of visible leakage and a relatively quick response to any waste reported. Public reputation and visibility deemed equally as important as economics.	Extremely low levels of leakage and a rapid response to any waste reported. Greater weighting on public reputation and visibility rather than on economics. Frontier position.
	Sector leading demand management activity				
Long-term financeability	A financeable business understanding robust stress tests	Limited awareness of key financial credit metrics across the business. No stress testing carried out.	Limited awareness of key financial credit metrics across the business. Stress testing carried out on actual structure.	High levels of awareness and understanding of how key credit metrics work. Stress testing carried out on both notional and actual structures.	High levels of awareness and understanding of how key credit metrics work. Stress testing carried out on both notional and actual structures.

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				All key metrics above known trigger points – for both actual and notional structure.	All key metrics above known trigger points – for both actual and notional structure. Future investment periods thoroughly tested.
Anticipate future evolution	Advanced knowledge of potential regulation changes	Limited view of impending environmental regulation changes and potential future reforms. Limited transactional involvement with the Environment Agency. Very reactive to impositions, not proactively shaping regulatory bodies to achieve balanced outcomes.	Reactive, short-term view of regulatory reforms. Relative transactional involvement with the regulator, no ability to influence the Environment Agency.	More proactive, longer-term view of impending regulatory change. Reasonable relationship with the Environment Agency, but a limited influence on the regulator. Some response plans in place. Proactively engaged in all consultations.	Well-established relationship with the Environment Agency at a strategic and tactical level, and proactive long-term thinking. Relationship with the regulator at national and local level, with the ability to influence direction. Clear road map of impending regulatory reforms. Well-developed response plan. Proactively engaged, and shaping reform and strategy.
	Proactive sector shaper	No consideration of impacts of a changing market place. Minimal foresight and little thought about new challenges or future reforms. Limited, short-term relationship with regulator.	Impacts of a changing market are considered. Some consideration of new challenges and future reforms. Responsible relationship with Ofwat, but a limited ability to influence the regulator.	Reasonably good foresight into potential future challenges and reforms. Some plans in place, with basic business models to deploy. Reasonable relationship with Ofwat, but a limited ability to influence the regulator.	Good understanding of the effects and influence of a changing market place with an understanding of timescale and company impact. Well-established relationship with Ofwat, and ability to influence at a strategic and tactical level. Proactive long-term thinking. Well-informed views of possible new challenges and future reforms. Well thought through business models, good insight and foresight with systems ready to deploy when situations change.

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Health, safety and security	A mature approach to security	<p>An immature safety management system is in place.</p> <p>No visible leadership – no policies or vision documented.</p> <p>Safety matters only communicated at an incident.</p> <p>No awareness or processes documented for cyber security – with little understanding of the risks.</p>	<p>An integrated management system is in place.</p> <p>Clearly articulated vision and policies.</p> <p>Communication typically delivered as ‘one to many’.</p> <p>Relative awareness of cyber, with awareness briefings delivered to all our people.</p>	<p>An integrated management system is in place – with managers taking action when poor practices are brought to their attention.</p> <p>Everyone understands the vision and policies.</p> <p>Communication is a two-way interactive discussion, with our people having the opportunity to test understanding.</p> <p>Beginning to implement these layers into a cyber-security approach.</p> <p>Good understanding of the risks of potential cyber-attacks.</p>	<p>Everyone taking a proactive approach to support the health and safety culture.</p> <p>Everyone believes and is committed to the vision and policies.</p> <p>Commitment to health and safety, its strategic importance and the drive for continuous improvement are recurring themes integrated into all communication.</p> <p>Good knowledge, maturity and implementation of the five key layers of cyber security – identify, protect, detect, respond and recover.</p>
	Safe working environment and culture	<p>Basic compliance with health and safety legislation.</p>	<p>Protective equipment and clothing is provided.</p> <p>More advanced health and safety plan for all company sites.</p> <p>Better training and communication to ensure our people are informed.</p> <p>Risks are explained to our people and a competent person identified who is responsible for each risk.</p>	<p>Clear health and safety plan covering our people and the public for all company sites.</p> <p>All workplace incidents and near misses are reported and recorded.</p> <p>All our people are given appropriate health and safety training necessary to their job.</p> <p>Noticeable decrease in the number of RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013) reportable incidents.</p> <p>Our people have access to occupational health advisors, and advice and counselling</p>	<p>Best practice health and safety procedures adopted; focus from the top to the bottom of the organisation on creating and maintaining a positive culture and behaviours with respect to health, safety and wellbeing.</p> <p>Regular safety audits and inspections from which actions are monitored, tracked and closed out.</p> <p>Regular staff surveys to monitor, track and action staff culture and behaviours.</p> <p>Zero RIDDOR incidents.</p> <p>Fully compliant with best practice across the sector.</p>

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				There is a focus developing on public health and wellbeing.	Risk elicitation. Good level of self-assurance. Culture. Sector-leading health and wellbeing of our people, contractors and customers Accident Injury rate compared in and out of sector. Knowledge share.