Chapter 3

Our Ambition and Pathway to PR19

Summary

Our ambitious vision, defined by five, shared, long-term outcomes, is to create a resilient water future for customers in the South East. We achieve our ambition in a simple way through a combination of becoming *brilliant at the basics* and delivering 5 transformational programmes.

We fully recognise that, whilst we have a simple strategy to deliver an ambitious vision, the outcomes we have defined demand step changes in our approach, culture and some performance areas. Time is of the essence, so we have already started work on delivery through our Business Transformation Programme and Pathway to PR19 Plan.

Chapter headlines at a glance

Our business plan:

- accepts there have been historical challenges and incorporates learning to improve our governance, business processes, reporting and monitoring
- drives a culture that places greater emphasis on customers, compliance, ethics and innovation
- draws on the priorities of customers and other stakeholders, regulatory and legislative drivers, good practice from many sectors, a long-term understanding of context and our own analysis to produce an evidence-based plan of action
- looks long-term to 2050 and beyond, in response to major nationwide challenges such as population growth, the impacts of climate change and the risk of coastal flooding
- sets out an ambitious vision of creating a resilient water future for customers in the South East
- designs-in resilience to our vision, reviews risk and opportunity across operational, corporate
 and financial resilience, tests customer support and operationalises ways of mitigating and
 managing risk through our Water First and Environment+ programmes
- adds two further resilience pillars, Environmental Resilience and Systems of Systems resilience to lead the development of resilience in the wider sense of utility of water
- aims to create a culture of being passionately curious, open to new ideas and skilled in collaborative action and, as a result, brings the future to life faster and more efficiently
- is based on shared, region-wide views of the future, based around the utility of water

3.1 Our plan benefits from wide-ranging input and contributions

We have engaged with and drawn from a wide range of sources to inform our business plan. The main sources are outlined in the chart below.

Figure 1: Contributions to our plan



3.2 We have substantially widened our definition of customers...

We recognise we are a provider of critical services to our customers and must excel in delivering these services. We also recognise we have an additional responsibility to help create an economic, environmental and socially-resilient region which requires a wider view of our customers. We therefore distinguish between water utility customers and utility of water customers. Water utility customers may be broadly defined as bill-paying, but we recognise they take different forms and have different needs. Utility of water customers, who have a wider relationship with water in its holistic sense, must be carefully and specifically engaged. We have considered how we segment these groups and our plan outlines how we deal specifically with all of them to deliver great customer service and to help jointly create a resilient water future. The diagram below summarises the profile of different customer groups.

Figure 2: Customer segmentation

"an <u>orqa</u>	Onisation supply	For	vater uti whom the de services su	finition of ut	ility is:		the public"	
	usehold customer							
Bill payers	needs linked to vulnera		mers in able istances	developers		Community facilit like schools and hospitals	Transient users of water services e.g. business people, patients, pupils	
"for these customers we must be <i>brilliant at the basics</i> " Our utility of water customers								
For whom the definition of utility is: "the state of being useful or beneficial"								
Young people They are future customers Water is crucial to their health and future economic wellbeing. Importance of inter- generational fairness.	Energy sector stakeholders Around 28% of water is used for generating energy. Customers are consumers of heat, power and light. Audiences include energy companies.		Food and drink sector stakeholders Around 70% of water is used in the production of food and drink. Customers are consumers of food and drink. Audiences include farmers, manufacturers, regulators and consumers.		Tourism, leisure and wellbeing stakeholders We have one of the highest tourism per capita spend in England. Customers are tourists visiting for our beaches and coasts and people enjoying local water environments. Audiences include the businesses that serve this sector.		Place-based champions The future of our communities is highly dependent on water. Customers include local authorities, developers a community organisation	
	"for these cus	stomers	s we must he	lp them real	ise the va	alue of water"		

...and we have substantially widened our definition of resilience

We have extended our definition of resilience. In addition to financial, corporate and operational resilience, we have added two further pillars, Environmental and Systems of Systems resilience. System of Systems is the viewing of multiple, dispersed, independent systems in context as part of a larger, more complex, interdependent system to deliver greater value and utility. Water and wastewater services do not operate in isolation; they are interconnected with, for example, energy generation, food production, housing development, environmental protection, our tourism sector and other vital industries and services. In turn, these are connected with each other – creating regional Systems of Systems.

3.3 We have addressed the challenges and risks that are specific to the South East region

Our regional profile is unusual

The South East has the second highest GDP¹ and the fourth highest tourist per capita² spend in the UK. It also has some of the highest development rates for housing and economic expansion. Our analysis of four Local Enterprise Plans reveals a high dependency on water among economic growth sectors.

We have 700 miles of coastline and 70% of our water comes from underground sources. The National Infrastructure Commission (2017) has specifically identified risks in the South East, stating that climate change "will result in widespread deficits across many water resources zones if there are no adaptation interventions – most acutely in London and the South East."

The population of the region is growing and changing

Our population has grown by 13% in the past 15 years – an additional half a million people. There are expected to be five million people in the region by 2041, a further increase of 15%. Like other regions, there will be a higher proportion of older people, up to 40% in East Sussex by 2039. We have a lower rate of unemployment than any other region in the UK, while the South East is the second most popular region for migrants³.

More extreme weather events will increase risks of water shortages and flooding

By the 2040s, 38.5°C will be a normal UK summer temperature, leading to heat-related deaths more than tripling. The number of households at significant risk of flooding will more than double to 1.9 million by 2050 if the global temperature rises by 4°C. Many places in the UK will have a demand for water 2.5 times greater than that available⁴ and severe water shortages are expected by the 2050s. Without action, our analysis predicts a supply and demand deficit of 245 Ml/d by 2030.

Water is of fundamental value to customers' lives

Water is fundamental for the production of life's essentials, not least energy generation and food production, which are critical to the South East economy. As a result more companies that produce products for consumers see water availability and quality as a growing risk which they need to manage. The CDP Global Water Report 2017 analysed water data from 742 disclosing companies and saw a 40% increase in the number of disclosures in 2016, with 70% of companies now reporting on water targets to their boards. Globally, based on current trends, water demand in 2030 is projected to exceed sustainable supply by 40%. This shortage is also expected to be a major driver behind increased migration and tourism destination choices⁵. Tourism as a whole contributes £8 billion Total Direct Gross Value Added to the South East region, of which water-related tourism, including day visits to beaches, contributes a large part⁶.

Political, regulatory and stakeholder expectations are changing

Political, regulatory and stakeholder expectations are high and increasing. Recent reports include the UK Government's new 25-year plan to improve the environment, the National Infrastructure

Commission's report (April 2018) on preparing for a drier future, the new Financial Reporting Council UK Corporate Governance Code (July 2018) and the Ofwat July 2018 consultation on Board leadership, values and transparency. Significant detail on our context review, our own figures and analysis and our customer and stakeholder consultation appear throughout this document.

The future of water in the South East will be significantly affected by major external trends

In 2017, we commissioned a report from futurist Peter Kingsley called "Water Futures in the South East: Towards 2050", which identified six major trends. These were global climate and environment, new forms of regional governance, ecosystem thinking, new technologies such as nanoscale filtration, sensors and artificial intelligence, the growth of radical innovation, and the changing cultural values of the public, customers and stakeholders. Many other reports reveal the impact of these issues, including the World Economic Forum's assessment of the risks and opportunities of technology innovation (2017) and the World Water Development Report on wastewater as an untapped resource (also 2017).

Together, this is an extraordinary collection of statistics and challenges. We have taken account of these elements in producing a plan which extends beyond conventional thinking to deal with an uncertain future.

3.4 Customers and stakeholders have influenced our plan

We have had over 42,000 direct conversations with customers and stakeholders. We have also gathered customer insight from other sectors and from research across the globe. Their views have directly influenced the evolution of our plan as highlighted below.

Figure 3: Indicative customer priority measures and actions in response

Customers and And will So we shaped Stakeholders told us... our plan by... continue to... Water Changed approach Using modern · High priority for water to be natural and safe to drink from dosing to replacing lead technology to provide Limiting chemicals, including those added real-time data to Actively participate in delivery with incentives around customers so they · Catchment is preferred, environmentally responsible can monitor use · Customers want to co-deliver on their priorities Replacing 350km Leakage is wasteful – so suppliers need to do their bit of old mains pipes lead replacement, Incorporation of more using new and partnering Customers then need help to reduce their consumption catchment-based solutions such as activity where possible Technology should be used to develop innovative solutions river groups etc. valve automation **Waste Water** Greater use of Better understanding sustainable of risk through Develop more environmentally sustainable approaches enhanced monitoring approaches · Prefer a mix of solutions to improve resilience Develop approaches surface water) · Prioritise flooding prevention of key infrastructure through community Trialing use of engagement/pilots Use rain gardens, soak aways and sustainable drainages Trial use of FOG batteries at and by working jointly • Approaches to reduce surface water entering sewage system in digesters to Peacehaven to with partners such as the developer increase gas support renewables · Want us to use renewable energy sources and energy production and resilience at Otterpool Retail · Expect a personalised service tailored to their needs retail propositions including solutions to empower customers by showing them **their** · Ability to be more in control of their payment plans Use our segmented - a tailored service water use · Help me understand how my water use impacts my bill view of customers and their preferences · Reward behaviour (e.g. online), rather than penalise Customer experience Working with trusted partners to support to engage them through co-delivery Understand my financial challenges and offer holistic support framework - Provide a choice of channels so I can choose how to contact embeddina customers who need with our Customer customer priorities Action Group Panel

"...there's probably going to be a larger population and then the sustainability is going to go down."

Year 11 male, Isle of Wight, 2017

3.5 We have placed the issues customers care about most at the heart of our plan

Customers have identified a small number of key issues they care about most. In summary, there are four broad themes. They want us to be *brilliant at the basics*, to be ready for the future, to take care of water and to look after the environment. We have addressed all of these in our plan. Indicative issues and measures are identified below, along with targets for 2025. Priorities are based on a synthesis of a large number of key research platforms outlined later in our plan.

Table 1: What customers care most about, our current performance and the future

	Southern Water now	In the future – year-by-year improvements towards these targets		
Water quality	99.96% compliance with regulatory standards for water quality in 2017/18.	The metrics are not comparable. Our target for CRI is 0.95 by 2025 reducing from 5.46 at present.*		
Leakage	Among lowest levels of leakage in the sector.	Reduce by an additional 15% by 2025 and 50% by 2050.		
Supply interruptions	The average time customers were without water in 2017/18 was seventeen minutes.	The target for 2025 is 5.30 minutes.		
Help to reduce water consumption	Current average daily use is 129 litres a day (England and Wales average is 140).	Reduce to 120 by 2025. Reduce to 100 by 2040.		
Reduce sewer flooding	401 incidents in 2017/18.	Reduce to 350 by 2025.		
Focus on environmental sustainability	All 83 bathing waters meet quality standards. 53 bathing waters are excellent. 98.4% of our wastewater treatment plants were compliant in 2017/18.	Take five more bathing waters to good and two to excellent.		

^{*}NB: Measure of water quality changes from MZC to CRI in AMP7

Our customers' desire for an easy customer experience and our actions to become *brilliant at the basics* are covered in full in other chapters.

(A more detailed view of our proposed Performance Commitments (PCs) is provided in Chapter 6.)

3.6 Six guiding principles have been consistently applied in creating our plan

We learn from the past to inform the future

We need to learn from historically poor performance in specific aspects of our business and to address recent failings. We have fallen short of the expectations of our customers, regulators and other stakeholders. Our plan accepts these realities and defines specific actions we have taken or are taking to address them as we strive to fundamentally change the way we work. We are deepening our understanding of what matters most to customers, seeking best practice beyond our traditional sector boundaries and building a culture where innovation is valued.

We are implementing a Modern Compliance Framework (more detail of which can be found in chapter 7) and have already implemented a new structure to improve compliance. We will adopt an ethics-based, transparently fair framework, which matches rewards for executives and shareholders with outcomes for customers, to improve trust and build confidence with all of our stakeholders.

As a water utility we must become brilliant at the basics

We have radically changed our Board and our Executive Leadership Team (ELT), adding additional members bringing further relevant experience and capabilities. They in turn have engaged our management teams and leaders in an open and honest way, and all have committed to improved transparency with a determination to deal with the problems of the past and deliver our commitment to being *brilliant at the basics*.

We have consulted directly with over 42,000 customers and other stakeholders in developing our plan. They have told us their priorities for us as a water utility and this plan reflects these priorities. Through our Business Transformation Programme and Pathway to PR19 we are accelerating improvements where our track record is not strong and improving on those areas where we already do well.

We plan for a holistic customer experience

Our thinking needs to embrace the whole customer experience. This means the quality of water customers receive, its taste and smell, the reliability of supply and the quality and ease of customer service. It also means the customer experience when we dig up the streets, when there is flooding or traffic disruption, when they enjoy the natural water environment, of rivers, reservoirs and beaches. We must make it easy for them to act where water touches their lives – saving water, reducing the risk of blockages, helping keep their water environment clean and staying hydrated during hot weather. Ultimately it means listening to their views and providing them with opportunities to actively participate in creating a resilient future for water.

We need a deep understanding of long-term context

We face one of the most exceptional periods of change in our history. Population growth, new housing developments, economic uncertainty, wetter winters and drier summers all focus our need to go beyond business as usual. Flooding and water shortages in our region, in the UK and internationally are also much more likely to occur. The potential impact of these issues on the lives of customers is high and immediate, often in ways that may not be apparent for customers today, such as the critical role of water in generating energy, in food production or to support tourism. Looking long-term gives us an understanding of the dynamics that could impact resilience and defines the actions we need to take now to prepare.

As a responsible water utility we have a platform and a duty to deliver the utility of water

Water plays a central role in the lifestyles of customers, both directly, with drinking water on tap and the ability to flush and forget used water, and indirectly too, where water is essential for energy generation, food production and the enjoyment of the water environment. That means we have two critical roles, first as a water utility to deliver essential services to bill-paying customers and secondly to understand and take into account wider customer interests where there is a dependency on the utility of water in their lives.

We achieve resilience through shared, innovative, collaborative action

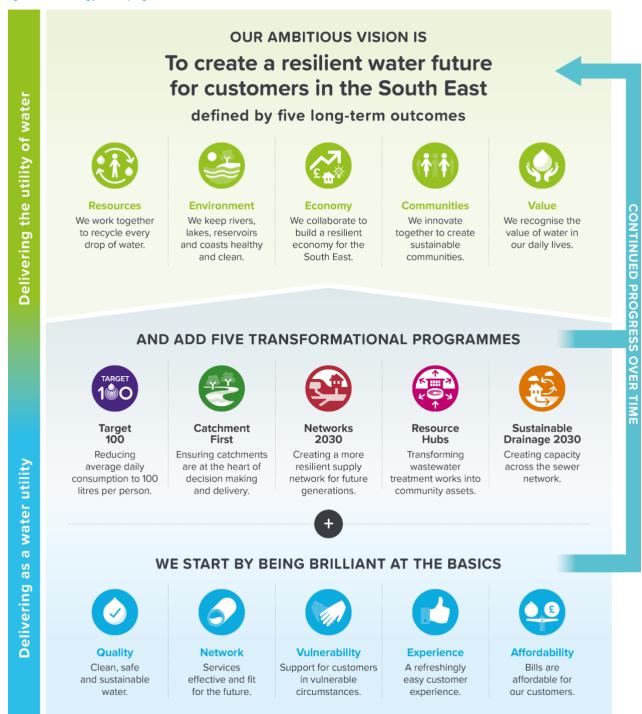
We need to deliver a resilient water future through collaborative action and by being a proactive, value-adding contributor to national, regional and local systems. We must help enhance a supportive regulatory and political system, fair and balanced benefits between customers and shareholders, collaborative innovation across the water sector and play an active role alongside the energy and food sectors in delivering solutions to the water-energy-agri nexus.

"We support the ambitious approach that Southern Water is advocating, both towards supplying the basics, such as customer service, as well as more ambitious projects to reduce impact on the environment."

Councillor Seán Woodward, Partnership for Urban South Hampshire

Our ambitious vision, defined by five shared long-term outcomes, is to create a resilient water future for customers in the South East. We achieve our ambition in a simple way through a combination of becoming *brilliant at the basics* and delivering *5 transformational programmes*. Time is of the essence, so our work has already begun.

Figure 4: Strategy on a page



3.7.1 We will become brilliant at the basics

Being *brilliant at the basics* means delivering a number of key outcomes for customers within AMP7. Successfully achieving these outcomes demand step changes in our approach, culture and some areas of performance allied to a relentless discipline of continuous improvement. This is addressed in detail throughout this plan and summarised in the outcome descriptions below.



Outcome 1 We supply clean, safe and sustainable water

We will improve our position on the new water quality metric, Compliance Risk Index, from 2.65 in 2019/20 to 0.95 by 2025 – this will put us in the upper quartile. We will also reduce the number of complaints we receive on water appearance issues from 0.919 complaints per 1000 customers in 2019/20, to 0.48 by 2025. In terms of water supply resilience, our customers are among the most water efficient in the UK and use around 16% less water than they did in 2010. The UK average, according to Water UK, is 141 litres per person. In our region, the average is 129. We aim to help customers reduce water consumption to 120 litres a day by 2025, and to 100 litres per person, per day by 2040. In addition, 87% of households in the region now have a water meter and we aim to increase meter penetration to 92% in the most water-stressed areas. We also plan a further reduction in leakage of 15% from 105.4 Ml/d in 2019/20 to 89.6 Ml/d by 2025. Our leakage reduction and *Target 100* actions will result in demand reduction of 38 Ml/d in AMP7. We aim to be in the upper quartile for both PCC and for leakage reduction.



Outcome 2 The services we provide are effective and fit for the future

We are planning to install 2,500 smart water-quality sensors, replace 330 km of water mains, and reduce leakage by 15% by 2025. We will also retire 21 water supply works and commission three new ones, decommission 75 water service reservoirs and build 17 new ones, and have a semi-autonomous water network by 2030 and a fully autonomous network by 2050. The first network we'll transform will be in Brighton where we intend to decommission 14 storage reservoirs and replace them with two new ones. We'll rationalise five water supply works into one – our largest new supply works since 1982 –use catchment management methods to reduce risk of contamination from pollution in the South Downs, and support customers to reduce their consumption as part of *Target 100*. We will significantly reduce the risk of flooding as we move to more intelligent networks, predicting and responding to different flow conditions. We will continue to work with customers to take materials that cause blockages out of the system, and work much more closely with developers and others to plan for growth.



Outcome 3 We support our customers in vulnerable circumstances

We actively support around 16,000 customers on our priority services register. We plan to further improve support to people in vulnerable circumstances so that 90% of those receiving this support say that it meets their individual needs and requirements. We will achieve this outcome by using data to help identify customers with vulnerability issues, simplifying our approach to registering, highlighting the need for support, and working with expert organisations to deliver support. Our new Customer Inclusion Partner Network (CIPN) will challenge and inform our actions.



In the current five-year period our customer satisfaction score has been one of the lowest in the water sector. However, we are improving. In 2017/18 we cut written complaints by 21%, adding to the 47% reduction we achieved in 2016/17. We have also become much faster at managing written complaints, with 75% now resolved within three days. We have substantially narrowed the gap between our performance and the water sector average. Our customer satisfaction score increased 6% in 2016/17 in the UK Customer Satisfaction Index, the largest increase in the sector.

Our aim is to accelerate in those areas where we are not strong and steadily improve where we are. We have a range of customer propositions, based on detailed customer insight, to significantly improve customer service. These include the fast and effective resolution of issues, increasing flexibility in the channels customers can use to contact us, and growing personalisation in water and service use. Our aim is to be upper quartile on Developer Measure of Experience (D-MeX) and above average in Customer Measure of Experience (C-MeX).

We will further improve customer service by personalising each customer experience, giving customers more choice about how they contact us (phone, online, letter) and more control over their experience of consuming water (smart metering, use of grey water and rainwater). Our customer engagement and participation strategy will widen and deepen our customer insight and the number of customers who are active participants.



Outcome 5

We make sure our bills are affordable for our customers

The average combined bill for water supply and sewerage services in 2017/18 was just £1.15 a day. Since 2015 a total of 229,843 customers have received tailored advice about how to pay their bills and tackle debt. Now we plan to further improve affordability by reducing bills by over 3%, by helping reduce daily consumption and improving support so that at least 90% of customers who receive assistance can pay their bills. Our *Target 100* programme to reduce per capita consumption will further improve affordability as 87% of households in the region now have a water meter. Improving efficiency will also improve affordability.

3.7.2 Jointly creating transformational programmes drives us to a resilient water future

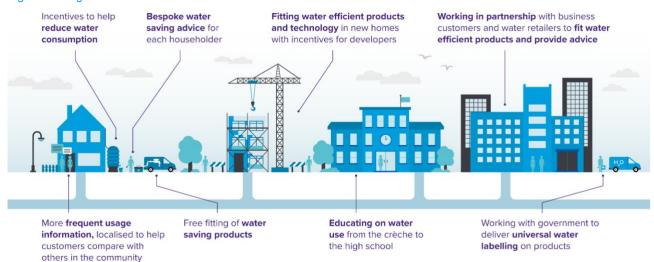
Our *transformational programmes* support and build upon our plans to be *brilliant at the basics*. They have been developed from a combination of customer and stakeholder insight and innovative thought leadership. They have been tested and informed by UK and global best practice. And we believe they are examples of co-imagination and co-creation.

Our five programmes are:

Target 100

Our intention is to reduce average consumption to 100 litres per person, per day by 2040. This will help reduce waste and ensure more water is available for homes, business, and the environment. Our customers have told us they are willing to reduce consumption. They demand we play our part, so we will commit to our leakage reducing, at a rate that more than matches the reduction in consumption.

Figure 5: Target 100



Through *Target 100* we will make better use of our data to provide more customers with bespoke water-efficiency support; including products and advice. We'll use a range of levers to incentivise customers to reduce their consumption and maintain low levels. We'll encourage new homes to be even more water efficient through incentives and the planning system, pressure government to introduce water labelling across all water-using products to increase customers' awareness, upgrade all our meters to smart meters to give customers access to real-time information, and we will educate customers on the true value of water to instil lasting cultural change. We will also be working with other water companies and other stakeholders to push for universal metering, regardless of water-stressed status.

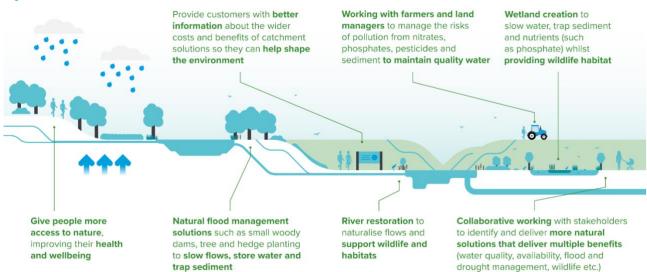
"We are particularly pleased with the ambition on per capita water consumption highlighted through *Target 100*, which is industry leading, (and) the stepping up of your planned investment in catchment-based solutions."

Nathan Richardson, RSPB

Catchment First

We need to rethink how we plan and work so our focus broadens from traditional approaches to more natural solutions. We will work collaboratively and embrace ecosystems thinking to deliver environmental, societal and economic benefits.

Figure 6: Catchment First



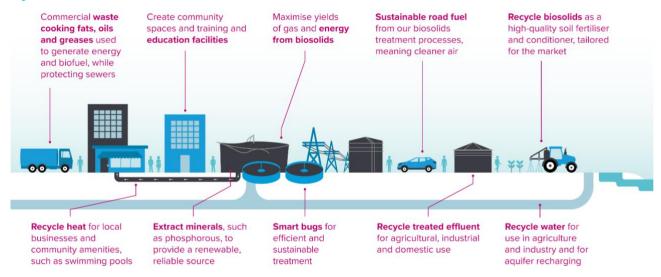
Catchment First is our transformational programme to put catchments at the heart of our decision making in order to achieve a more resilient environment and service. Our vision is for catchments where groups of stakeholders work together to develop and deliver benefits in water quality and availability, flood management and wildlife. In addition, and through better access to nature, we will improve people's wellbeing.

Examples already underway include working with partners on the Brighton Chalk Management Partnership (ChaMP) to reduce the amount of pollutants, such as nitrates, entering our water supplies. We are building strong relationships with catchment partnerships and environmental organisations across our region. We are working with the University of Kent on an innovative project which will help us predict what our catchments may look like in the future and we are collaborating with the Environment Agency and catchment partners to better understand the health of our catchments and to build an evidence base to inform decision making.

Resource Hubs

Our infrastructure can do so much more for our communities. We will transform our larger treatment works into a resource for local people – so that we all value our water.

Figure 7: Resource Hubs



Our treatment works can seem distant from the people they serve. We want to bring them much closer to the heart of their communities. We'll transform them into *Resource Hubs* by recycling wastewater, generating renewable energy, supporting community amenities and providing space for training. Our *Resource Hubs* will still treat wastewater to the highest standard – but they'll also increase resilience and enhance the natural, social and economic capital of their communities.

The first site we'll transform will be our Peacehaven works near Brighton. Through it we will increase the amount of renewable energy we generate to 100% – making the site energy neutral in the long term. We will work with a local energy co-operative to explore if we could increase the amount of energy generated from food waste. We will take waste cooking oils from local business, preventing it from blocking our sewers and increasing the amount of biogas we generate. We'll redirect 50 million litres of treated water each day to rivers rather than the sea, enabling water reuse schemes and collaboration with a neighbouring water company to increase the resilience of the wider Brighton area. We will also provide a new space for our South East Skills Academy – working in partnership with nearby schools and Science, Technology, Engineering and Mathematics (STEM) colleges.

Sustainable Drainage 2030

Our drainage systems are a crucial part of the region's infrastructure, helping to protect our environment and enabling future growth. New technology and more sustainable approaches are helping us make more effective use of our existing network.

Figure 8: Sustainable Drainage 2030



Through **Sustainable Drainage 2030** we will transform our sewerage networks to ensure we support sustainable growth and are protected against climate change – ensuring they are fit for future generations. We have almost 40,000 km of drainage networks across our region, from remote rural locations to some of the most densely-populated areas in the country. They will come under increased stress.

We intend to build on our successful Portsmouth surface water separation schemes, where one third of storm water was removed from our sewers and more than 7,000 properties were reconnected to a new surface water drainage system. We'll adopt this kind of approach for communities across the region, encouraging greater use of blue-green infrastructure, such as sustainable drainage systems, rainwater capture and other similar opportunities.

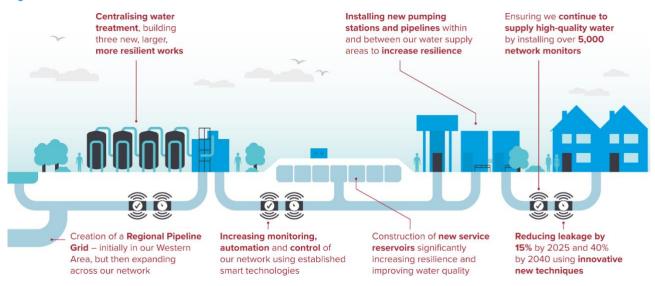
We'll also use new technology and data analytics to improve our ability to manage capacity in our networks and reduce risks from more extreme weather. We are playing a prominent role in an

industry-wide group developing future policy proposals, working with developers to make sure new developments are as sustainable as possible and encouraging manufacturers to re-label wipes so they're less likely to cause blockages. We want new developments in the South East to be models for sustainable living. For that reason we've been working closely with the Ebbsfleet Development Corporation and the planned new development at Fawley Waterside to ensure the new towns are as sustainable as possible.

Networks 2030

Our water networks provide a vital public service – reliable, clean drinking water. However, they are under pressure due to age, climate change and population growth. We need to embrace new technologies, improve network interconnectivity and reduce leakage to ensure resilient water networks for future generations.

Figure 9: Networks 2030



Through **Networks 2030** we will rationalise and automate our networks to improve interconnectivity and ensure an efficient, resilient system for generations to come. This doesn't mean a big increase in spending. We will invest much more effectively and fully embrace innovation to meet the challenges ahead.

We are planning to install 2,500 smart water-quality sensors, replace 330 km of water mains, and reduce leakage by 15% by 2025. We will also retire 21 water supply works and commission three new ones, decommission 75 water service reservoirs and build 17 new ones, and have a semi-autonomous water network by 2030 and a fully autonomous network by 2050. The first network we'll transform will be in Brighton where we intend to decommission 14 storage reservoirs and replace them with two new ones, rationalise five water supply works into one – our largest new supply works since 1982 – use catchment management methods to reduce risk of contamination from pollution in the South Downs, and support customers to reduce their consumption as part of *Target 100*.

3.7.3 We will create a resilient water future together

Our shared long-term outcomes

Being *brilliant at the basics*, and implementing our *5 transformational programmes*, will, together, lead to the achievement of our ambition of a resilient water future for customers for the South East. That ambition is defined by five, shared, long-term outcomes outlined below. These outcomes

demonstrate a step change in collaborative action with customers and stakeholders to co-create a preferred, shared future for water in the region. These shared long-term outcomes have emerged from customer insights, regulatory expectations, and operational imperatives.



Shared long-term outcome 1

We work together to recycle every drop of water

To achieve this outcome we will continue to extract every bit of value from wastewater – recycling used water to rivers, recovering valuable minerals and biosolids for agriculture and gas for energy, and increasing customer use of grey water and rainwater.

When we are successful, people across the region will use water-efficient products and live in water-efficient homes. People and businesses will talk first of water-value practices and consumption and then of cost. There will be no wastewater treatment works, only water recycling plants. Our water resource management plan (WRMP) includes three water reuse schemes for 2020-25, which will recycle 46 million litres of water daily. We will be generating energy from waste, three of our main treatment sites are already net exporters of energy and we will be using our Peacehaven site to test more innovative approaches. Our research and development programme is exploring opportunities to recycle minerals from wastewater. We will be protecting and improving an environment that continues to attract visitors, and creating a water-resilient platform to enable economic growth.



Shared long-term outcome 2

We keep rivers, lakes, reservoirs and coasts healthy and clean

We will achieve this by implementing *Catchment First* and *Sustainable Drainage 2030* across the region by 2040. We will work with farmers and landowners to keep pesticides out of the water we abstract and keep our rivers healthy, using the natural environment to hold water and stop flooding. We will adopt a natural capital approach to managing and measuring progress, ensuring we take account of the wider environment such as enhancing biodiversity.

We will deliver one of our largest-ever environmental improvement programmes, improving the water quality in 537 km of river. And we'll go beyond regulatory requirements in improving bathing waters at a further seven locations. We are adopting innovative technology, such as at our Hailsham treatment works where we will remove more phosphorus than we have achieved before to protect the Pevensey Levels – an internationally-recognised area of biodiversity.



Shared long-term outcome 3

We collaborate to build a resilient economy for the South East

We are entering an era in which large-scale disruption is being created, as linked and increasingly-complex human and natural systems come under increasing stress. This in turn exposes the underlying fragility of socio-political and economic systems. A shared outcome is a resilient future economy which helps address these challenges in a planned and integrated way, embracing new approaches, new collaborations and new technologies. The growing realisation of the critical role of water in societal and economic resilience is welcome and we are ready to play our part.

To achieve this outcome we will play both a leading and supporting role in jointly creating the resilient economy the South East needs. We have completed an initial scoping of the economic dependency on water of the growth sectors in our regional economy. We now need to build on initiatives that have already begun. These include partnerships such as the Greater Brighton

Infrastructure Board to look at future planning of 'connected systems' of water, energy, communications and transportation, open dialogues with the farming and food sectors and the reinvigoration of Water Resources South East looking 80 years into the future to deliver regional infrastructure which safeguards water supplies in extreme drought. We are creating a skills academy working in partnership with our supply chain and local councils to create the skills we need for a resilient future. We will also continue our actions to help create vital and valuable water tourism through high-quality bathing waters and healthy chalk rivers.



Shared long-term outcome 4

We innovate together to create sustainable communities

We define innovation as "the process of identifying and implementing something new and/or something better that delivers value to our customers, other stakeholders and organisation." Communities has two meanings for us. Firstly in the geographical sense and the people who live in the communities of cities, towns and villages across our operational region. Secondly, in the global communities of people who share like-minded interests and expertise in developing and improving best practice. We are combining our thinking and action across both to help create innovative and practical sustained change for our customers, other stakeholders and the environment.

This shared outcome involves collaborative innovation for communities and with communities to support their sustainability. For example, our award-winning Beauty of the Beach campaign has been enhanced with the recent launch of Beachbuoy, an online service giving people real time information on bathing water quality. We're turning some of our major treatment works into *Resource Hubs* for local communities. In addition to recycling water, they will generate energy for local use, and host community meetings or training programmes. Our innovation programme **bluewave** combines lean start-up and design-thinking approaches in a dedicated physical innovation space and involves active collaboration and co-creation with customers and other stakeholders. We've been delivering on these challenges but want to be much more ambitious in the years ahead.



Shared long-term outcome 5

We recognise the value of water in our daily lives

The recognition of the importance of water is increasing in our region, particularly in times of scarcity or flood, both of which we are experiencing directly and more frequently in the UK. Through global media, people are aware of previously unimaginable extreme events which are having an impact on people's views. There is, however, a paradox that, perhaps due to its relatively low cost, the benefits and value of water are not commonly recognised or discussed. We understand that we have a significant role to play in changing this dynamic and shifting thinking towards the utility of water in society and the economy.

This is not an easy challenge, it will entail a significant mindset shift and new ways of talking about water in the future, articulating the benefits as well as the cost of high-quality water. We believe this will be achieved by critical indicators such as when customers talk readily about water efficiency, when recycled water is a norm not the exception, when the income generated from water tourism is articulated and when we utilise water as part of an economic growth strategy in an increasingly water-scarce world. To help us understand the pathways towards this outcome we have engaged more extensively than ever before with customers, commissioned research into the value of water in people's lives, livelihoods and lifestyles and explored how we jointly imagine a shared vision and create a long-term strategy for water in the region. Our business plan has been built around this learning. We must now deliver on the promises and commitments we are making, encourage customers and other stakeholders to tell their stories about the value of water in their lives and continue our programmes to educate future generations to ensure a sustained legacy.

3.8 We are taking action now to ensure our future plan delivers

We fully recognise that, whilst we have a simple strategy to deliver an ambitious vision, the outcomes we have defined demand step changes in our approach, culture and some performance areas. We could not, and did not wish to, wait until our business plan was fully developed to begin to make those changes. So in early 2017, following appointment of our new CEO and new Chairman, we launched a complete restructure of our executive management and substantially expanded our Board to ensure we had the capabilities to drive, at pace, the significant changes we needed.

These are being delivered via two highly-focused and interdependent programmes, Business Transformation and Pathway to PR19. These have been in progress now for more than a year and are already delivering results. Each has been carefully designed with the assistance of external companies, who continue to provide audit and assurance, and are being driven by experienced executives who have joined from businesses such as RBS, BT, JJB Sports and United Utilities where they have been engaged in initiatives of a similar nature and scale. Business Transformation and Pathway to PR19 also have Board sponsors who are providing expert input and assurance.

The nature and content of each programmes is summarised below.

Business Transformation Programme

Our Business Transformation Programme is key to delivering our *brilliant at the basics* capability. The programme is comprehensive and specifically designed to deliver significant, measurable improvements in effectiveness and efficiency across our organisation to establish a more sustainable and resilient business model. It is underpinned by a cultural change programme, IT and process change and builds on the significant people change already brought about within the business.

As our PR19 plan has developed we have taken care to refine the transformation that is already underway to embed the customer and stakeholder commitments in this business plan submission and in our Pathway to PR19 Plan.

Figure 10: The Pathway to PR19



Pathway to PR19

We have analysed in detail Ofwat's PR19 methodology and the key performance parameters, such as bad debt, average cost to serve and efficiencies that we need to deliver in AMP7 to meet our business plan commitments. Wherever possible these have been set as the end performance levels for our AMP6 performance and glidepaths or pathways established with action plans to move from current to PR19 performance levels within the remaining time period. These are all subject to Key Performance Indicators and measures and are reported monthly to both the executive and the Board.

A dashboard capture of the report is shown below:

Figure 11: Golden Numbers PowerPoint



3.10 Envisioning our preferred future

Our ambition is best defined by looking far ahead and defining what our preferred future looks like. Our intention is, of course, to further engage customers, employees, suppliers, partners and other stakeholders in imagining the region's preferred future, to ensure, over time, that ours is a shared regional ambition. The summary below imagines what this future looks like, based on our current understanding of context and the plans we have outlined. It is our starting point of envisioning that future.

In the future there are more people in our region. Long periods without rain are the norm.

There continue to be periods of sustained heavy rain which cause flooding. But we are ready.

We have adequate water supplies. We have very low leakage rates. We are collaborating with others in the sector. Our integrated smart water network has the ability to dynamically divert water supplies to meet demand elsewhere. Our integrated smart wastewater network has capacity built-in and therefore reduces the risk of flooding.

Collaborative regional governance models between infrastructure providers, regions, cities, local communities and policy makers have a shared sense of vision and purpose aimed at delivering place-based resilience, new efficiencies, lower costs and higher environmental standards.

Our customers understand the wider value of water and make informed decisions on how they manage their water – aided by an integrated home management system that provides them with tailored information on their water use. They use rainwater where they can. Smart home devices enable them to use a different quality of water for different needs. Everyone knows they need to recycle every drop of water. Customers are also doing all they can to reduce the risk of sewer blockages.

In local neighbourhoods, no-one uses single-use plastic water bottles. Offering refills to aid hydration is a social norm on the high street. People act to keep rivers, lakes, reservoirs and coasts healthy and clean. Kids learn the value of water at school. Water and wastewater treatment works are, like schools and libraries, considered community assets and provide additional local services. Everyone looks out for those who need water and are in vulnerable circumstances. Communities are twinned with water-constrained communities from other countries through WaterAid. People understand their local water catchment area. Natural solutions to catch water improve the local environment.

Businesses, especially those in energy, food and tourism are collaborating to manage their water use and protect the water environment. As a result there is a much-reduced risk to energy or food following a loss of water availability in England and Wales. Visitors understand the value of water environments and act to improve rivers, lakes, reservoirs and coasts. New developments have sustainable water and energy use built in. Products increasingly provide information on water used in their creation.

Customers have an easy customer experience. It is the norm for us to accept great ideas from anywhere. The water people need in their lives is affordable for all. Customers can choose to pay for additional water for their lifestyles at an appropriate cost, provided it doesn't impact essential needs. Customers can share their views on the future of water in the region. And they can chose to help bring that future to life as active participants.

There is a supportive national political and regulatory system, and to help create a resilient future for water, we have created an open, collaborative, transparent, ethical and trusted business.

This is one view of the future. We know it will evolve and change over time. We face challenging and exciting times. As we said in our "Water Futures" publication, we need to make sure the water and wastewater services of tomorrow are resilient and can adapt to the needs of our customers and our region by facilitating growth and enhancing the environment.

By understanding the challenges and opportunities more fully, we can manage water wisely to add value to our region, both for the people living and working within it and the precious environment which makes the South East distinctive. We hope the people of the region will wish to help create a valuable and sustainable future for us and the generation who follow us.

Technical Annexes:

TA.3.1 Water Futures in the South East; Towards 2050

is a report we commissioned from futurist Peter Kingsley to look at the contextual issues that could affect the future of water in the region. It identified six major trends that could have a high impact. These were climate change, ecosystem thinking, increased collaboration, digital transformational change, nanotechnology advances and cultural and social change.

TA.3.2 Southern Water Futures

is a publication that summarises our response to the Water Futures report.

TA.3.3 Our Strategy Context Review

is a presentation summarising the wider context in which our strategy should be seen

References:

- ¹ Source, ONS
- ² Source, ONS
- ³ Source, ONS
- ⁴ Source: Committee on Climate Change report to Parliament, 2017
- ⁵ Source: World Economic Forum Risk Report, 2016
- ⁶ Regional value of tourism in the UK: 2013