## Our plan for healthy rivers and seas

April 2022



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#### Introduction

## Introducing WaterFit, protecting rivers and seas together.

There's no doubt that improving river and sea quality has taken centre stage, as waterbased recreation, such as wild-swimming, and paddleboarding have become more popular, and the pandemic has strengthened the bond we all want to have with green and blue spaces, now and for generations to come.

At South West Water, we are integral to communities across the region and what makes me so proud are the people who work alongside me, committed to serving our customers, listening and responding to their needs, innovating to ensure water for all, and protecting our environment from challenges today and for future generations.

In February, we announced that average water bills for our customers will fall in 2022, bringing welcome relief right across the region, at a time when escalating energy and food costs are concerning many. We did it, because it's the right thing to do, and because it's our role to listen and respond.

Over the past few months, **I've been listening to our customers, to politicians, regulators, and campaigners across the region**. We have been discussing the UK's sewerage system: the way it operates, the use of storm overflows and their impact on the UK's waterways. I'm pleased we're having that discussion – there's nothing more important than water – it's essential for life, health and the planet.

It's true we have a challenge. Our region has a vast network of pipes over 19,000 km long – enough to stretch to Australia! Each year, we balance investment to maintain it, to make sure that sewage doesn't flood homes, businesses and gardens, whilst at the same time, ensuring quality drinking water is there when we need it, whenever you turn on the tap.

We're also a region that sees huge population swings through the year. Water pollution from valued regional industries such as farming and mining, together with urban run-off, is increasing. Each year, our teams remove over 450 tonnes of rag from our sewers, equivalent to 30 double decker bases, and every time we flush a wet wipe or poor cooking oil down the sink, the end result is a pollution of some sort. And climate change is making the problem worse, leading to some of the worst storms we've seen in recent years, with devastating impacts.

As we install technology and learn more from our monitors, the more we discover about limitations of the Victorian sewage system here and across the UK. Spill levels from our sewage system are at an unacceptable high, whatever the causes. There is much in our base plans to 2025 that will deliver a tangible difference to communities but **it's clear we need to go further and faster now**.





#### Bringing water to life – supporting

the lives of people and the places they love for generations to come



In effect we will be getting WaterFit. WaterFit brings together existing plans to deliver multiple benefits as well as going further and faster with a new ambition. WaterFit outlines how we can all play our part, working with partners, customers, visitors and local communities to protect and enhance the South West's water for future generations, with clear and measurable objectives, and which will make a tangible difference to communities and customers, over the next three years, and with no impact on bills.

WaterFit will enable to us to expand our 100% excellent bathing water quality standards all year round, allowing everyone to enjoy our 860 miles of coastline, whether that's Christmas day or in the summer. We'll also reduce our impact on river water quality by one third by 2025, reducing spills from storm overflows to an average of 20 per year per overflow, increasing capacity in our infrastructure to the equivalent of 20 Olympic swimming pools. And we'll target delivering zero serious pollutions by 2025, with year on year reductions in all pollutions.

Simply put, getting WaterFit will help put nature on everyone's doorsteps – making water accessible to all, and always less than an hour's drive away, whether that's through access to over 40 inland lakes and reservoirs, or through achieving the region's first river bathing water.

#### We know we can't do this alone.

WaterFit will only work, if we all play our part.

That's why we'll continue working with farmers and partners right across the region to stop pollutants from land getting into our rivers and seas. We'll also partner with developers, campaigners and communities, to help everyone become more sustainable, whether that's building more homes, giving customers more data about river and sea health, or educating WaterFit warriors right across the region.

We want to make sure we have the priorities right for each community in the catchment. Our plan sees every community benefiting to 2025 but there are options. We need your feedback on our plans, about what we prioritise, and what we do first.

The water that comes out of your tap when you need it, the water that's processes in treatment works, and the water that flows from streams into rivers and the seas, is your water and I'm looking forward to working with you to ensure it's something that the South West can be proud of for generations to come.

#### Susan Davy

Chief Executive Officer

100% coastal bathing water quality

## Executive Summary

We want the South West to be the destination for water quality. WaterFit outlines how we will play our part, working with partners, customers, visitors and local communities to protect and enhance the South West's water for future generations.

There's no doubt that improving river and sea quality has taken centre stage, as water-based recreation, such as wild-swimming and paddling boarding have become more popular, and the pandemic has strengthened the bond we all want to have with green and blue spaces, now and for generations to come. Since PR19, there has also been a marked shift with the Government's 25-year Environment Plan, COP26, the race to Net Zero, the new Environment Act 2021 and associated consultations on future environmental targets.

South West Water has always been committed to delivering for the environment and has already taken steps in the right direction. Home to 860 miles of coastline and nearly four in every 10 coastal bathing waters, we value and prioritise the water environment. We have worked tirelessly across the region to improve the bathing waters around the coastline, which now for the first time has achieved 100% water quality.

We have also been an early pioneer through our award-winning, 'Upstream Thinking' programme. This is a catchment management programme where we work with local stakeholders to restore habitats, protect river water quality, reduce flooding and reverse climate change through managing agricultural land use practices and restoring peatlands across the catchments. Our experience of over 95,000 hectares of land improvements since 2015 across 80% of our region is that this is a low cost, low carbon way of reducing harmful nutrient run-off (phosphates and ammonia) into rivers.

Early in 2021 we outlined £82m of investment as part of our Green Recovery Initiative, which includes pilots for storm overflows, improving river quality, smart metering, water resource development and peatland restoration.

Last July, we set out our Net Zero ambitions, outlining our commitment to transform how we produce and use energy to become carbon neutral by 2030 through our three pillars – sustainable living, championing renewables and reversing carbon emissions. Initiatives, such as planting trees are important parts of this strategy and we plan to plant 250,000 trees by 2025, more than doubling our original target achieved four years early.

#### We know that we need to and can go further, faster.

Over 10 million visitors come to the South West every year, in addition to the 2.3m people that live in the region. We want the South West to be the destination for water quality. WaterFit outlines how we will play our part, working with partners, customers, visitors and local communities to protect and enhance the South West's water for future generations.

Spill levels from our sewage system are at an unacceptable high, whatever the causes, and whilst we are reducing pollutions year on year, with 2021's performance our best ever and lowest for 10 years, understandably the bar is getting higher and our headline star rating from the Environment Agency is likely to remain  $1\frac{1}{2}/2\frac{1}{2}$  until 2023 – it's clear we need to go further and faster now.



#### Executive Summary continued

WaterFit has been developed, building on our existing plans to ensure we can deliver this – across a wider range of commitments, as well as going faster and further with a new ambition. By front-loading and rebalancing £330m investment, we will focus on those projects that will deliver multiple benefits, focused on a catchment by catchment, community by community investment approach, ensuring all areas in our region are benefiting with no additional impact on bills.

Overall, WaterFit will enable to us to deliver a step change in both river and coastal water quality. It will enable us to expand our 100% excellent bathing water quality standards all year round, allowing everyone to enjoy our 860 miles of coastline. We'll also reduce our impact on river water quality by one third by 2025, reducing spills from storm overflows to an average of 20 per year per overflow, increasing capacity in our infrastructure to the equivalent of 20 Olympic swimming pools. And we'll target delivering zero serious pollutions by 2025, with year on year reductions in all pollutions.

WaterFit will only work, if we all play our part.

We also need your feedback on our plans, about what we prioritise, and what we do first in each community, ensuring all our areas in our region benefit.

#### **Our WaterFit commitments**

### **1** Nurturing healthy rivers and seas

We will:

Reduce our impact on rivers by 2025, by one third and put forward plans to target zero harm by 2030

Reduce spills from storm overflows to an average of 20 per year by 2025

Maintain our excellent bathing water quality standards, all year round, so that everyone can enjoy our 860 miles of coastline, whatever the time of year

Deliver zero serious pollutions by 2025, and target a year on year reduction in all pollutions

2

#### Putting nature on everyone's doorstep

We will:

Make bathing water accessible, less than an hour's drive, for 100% of our residents and visitors

Provide access to our 40 inland lakes and reservoirs, so that local communities can continue enjoying them for health and recreation

Achieve the region's first bathing quality river, using learnings from our current pilots on the rivers Dart and Tavy











### 3

#### **Creating and restoring habitats**

We will:

Stop pollutants from 120,000 hectares of regional farmland getting into rivers and seas by 2025, working with local partners

Restore an additional 1,000 hectares of peatlands by 2025, to create new habitats, improve river quality and reduce flooding

Plant a quarter of a million trees by 2025, to help combat climate change, support river health and create new wildlife habitats



#### **Inspiring our local champions**

We will:

Donate 25% of our Community Fund to local groups that share our passion for river and sea health

Launch our WaterFit Warriors programme, to inspire thousands of water quality champions in schools and communities across the region

Share progress with our customers through our unique WaterShare+ scheme at quarterly public meetings and our annual Customer AGM



#### **Creating a sustainable future**

We will:

Work collaboratively on the building of new developments in our region, to help us manage our network

Back the ban on non-flushable or plastic-containing wet wipes, to help prevent blockages

Work with our 10 million visitors, and 2.3 million customers, so they understand the important role they play in protecting our region, through our Love Your Loo campaign



#### Putting people in control

We will:

Work with partners to provide water quality information for residents and visitors, making it easily accessible on our website by the end of this year

Help people understand river health, by sharing real-time river water quality information, just as we do for our bathing waters, by 2023

Provide 100% monitor coverage at our treatment works and on our storm overflows, by 2023



### WaterShare+







#### **Next steps**

Our base plans for 2025 were already delivering much of WaterFit but going further and faster we are reinvesting efficiency we have achieved over the least two years to deliver this. By doing this, customer bills will not be affected and indeed our plans were for bills to be lower in 2025 than they are today.

We have developed WaterFit after an intense period of listening and engaging. WaterFit is the start of our next phase of engagement, with a 12-week consultation with customers, stakeholders and communities.

We know that WaterFit encapsulates what customers and communities want. But we want to ensure our prioritised plans focus on the highest priority outcomes first for each community. So we are engaging right across the region to understand how to get things right and make a difference.

While we are busy working on discussing and delivering current plans, we are also getting ready for our future plans.

We are currently developing:

- Our water resource plans for the next 25 years
- Our drainage plans for the next 25 years
- Our five-year business plan covering the period 2030-2035.

Our future plans will continue to improve the environment, alongside working in partnership with developers, campaigners and communities to call for homes and appliances to be water efficient, for wet wipes to be plastic free and biodegradable, and for sustainable drainage in urban areas.

## This is essential as there are future challenges that we face.

Our region is vulnerable to climate change and is experiencing considerable population growth. There is increasing concern about changing weather patterns and increased flooding risk, and there is the need for increased resilience towards these changes. We will continue in our post 2025 plans to drive for stretching goals that will South West Water to do more for our local environment and deliver the best for our customers even in future uncertain times. The work that we are doing now – piloting and testing improvements and innovations – is crucial in getting our future plans right.

## Phase 1 Dec 2021 - April 2022

 Acknowledge the challenge and listen

#### - Phase 2

- April 2022 ongoing 2025
- Start the step change - explain, involve and engage

#### Phase 3

- May 2022 onwards
- Build a legacy

**Executive Summary** continued

## **Our region**

**South West Water** is the water and wastewater service provider for Cornwall, Devon and parts of Dorset and Somerset. We also provide water services to Bournemouth Water customers in parts of Dorset, Hampshire and Wiltshire and the Isles of Scilly.



• Water Treatment Works

**Biosphere reserve** 

Blue Flag beaches

Shellfish

**Rivers** 

• Wastewater Treatment Works

National parks

### 2.3 million

Hayle

resident population equivalent (over 1 million customers) and **10 million** visitors to our area each year

Newquay 🤇

Camborne

Falmouth

Stithians 🜔



25 designated Shellfish Waters

Ashford

Littlehempston

Mayflower

**Marsh Mills** 

Cornborough

Northcombe

Ernesettle

Camels Head 🤇

Plymouth

Lowermoo

Restorme

Par

Menagwins

**34%** of all the designated Bathing Waters in England



pumping stations

- to move wastewater through our network and on to treatment works

# treatment works

- using a diverse range of processes and technologies

Provision of ultra violet disinfection or membrane filtration at

### more than 65 wastewater sites

to protect Bathing and Shellfish Waters to the highest standards

southwestwater.co.uk 11

## What we are achieving so far

#### **Delivering our 2025 commitments**

South West Water has made a robust start to this regulatory period delivering c.80%<sup>2</sup> of our ODIs in the first two years, including a number of areas where we are delivering outperformance and already meeting 2025 targets.

But there are areas, like pollutions where we are not meeting target and we need to do better.

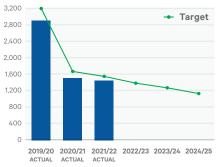
Focusing on our wastewater targets, we have seen continual improvements with reducing internal and external sewer flooding incidents as well as sewer blockages and collapses.

#### Internal sewer flooding

(incidents per 10,000 sewer connections)



#### External sewer flooding (number)



We understand the negative impact that sewer flooding has on customers, and we continue to do all we can to reduce the likelihood of these events.

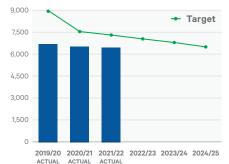
We have maintained our strong performance in 2021 and we are ahead of our commitment in these areas. Our key activities over the year include our programme of sewer cleansing and CCTV, targeted improvement and remedial works as well as installing sewer depth monitors at key points in our network to alert us to potential issues.

#### Sewer collapses





#### Sewer blockages (number)



Sewer blockages and collapses are lead indicators for flooding from our network and can highlight potential pollutions before they arise.

2 Final 2021/22 ODI performance under review and subject to final assurance

12

## 64% reduction

– industry-leading performance

> Halving external flooding – outperforming commitment



#### Outperforming sewer blockages targets

The number of sewer collapses has reduced significantly in 2020 and 2021 and sewer blockages are also outperforming our targeted performance commitments in these areas.

The reducing trend demonstrates that our programmes of work to reduce blockages in the network through investigating, cleaning and repairing sewers and our customer campaigns such as 'Love Your Loo' are making a difference.

#### **Delivering wider environmental benefits**

We recognise that our activities can have both a positive and adverse impact on the environment around us, encompassing everything from bathing waters to greenhouse gases. To reflect our environmental performance in the round, we have developed an Environmental Dashboard as part of our wider suite of environmental performance reporting.

This dashboard summarises the performance commitments we are delivering against.

Biodiversity	
Climate change and Net Zero	••
Water resources and efficiency	
Water environment	•••
Reliable wastewater network and treatment	•••••
Focus on delivery and operations	
EA Environmental Performance Assessment	

We are delivering positively against a number of metrics which are ahead or achieving target. Examples from the dashboard are:

- Biodiversity: on track to meet our commitment of planting 250,000 trees by 2025 – with 149,000 planted to date, ahead of our original target of 100,000; and over 95,000 hectares of land improvement – including our additional peatland restoration, improving our biodiversity
- Climate change and Net Zero: driving our Net Zero ambitions reducing emissions
- Water resources and efficiency: focus on water resources, efficiency and leakage
- Water environment: 100% bathing waters meeting standard first time ever, and accelerating bathing water enhancement schemes
- **Reliable wastewater network and treatment:** improving wastewater metrics supporting stable asset health and reliability
- Focus on delivery and operations: on track for the delivery of monitors at all storm overflows by 2023
- EA Environmental Performance Assessment: we are measured against six measures which provide a broad assessments of aspects of environmental performance, delivery and reporting. We are not where we need to be with the EPA assessment.

On track or ahead of target
Marginally behind target
Area of focus

Area of tocus

#### Environment Agency Environmental Performance Assessment (EPA)

The Environment Agency considers the performance of companies based on distinct specific measures – some of these are ODIs which are included within our regulatory performance commitment framework, whilst others relate to the delivery of the capital programme and other operational metrics.

We are focused on making improvements in the EPA and the investments and interventions we are making support our trajectory to improve our overall position from 2023 onwards, achieving a 4 star rating by 2024.

Our headline star rating to date has been 12/22 and for 2021 beneath the headline 12/22 rating improvements have been made, but we know there is still further to go.

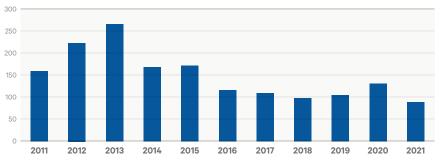
EPA	2021*	2020
Pollution incidents	145	225
Serious pollution incidents	8	3
Treatment works compliance	98.1%	99.0%
Self reporting	68%	74%
NEP – Capital programme	100%	100%
SoSI / SDBI	100%	99%
Star rating	★/★★#	**

\* 2021 EPA performance is provisional. Two wastewater treatment works compliance incidents under review - 98.1% reflects four wastewater and two water treatment works failures

<sup>#</sup> Subject to final EPA closedown

#### **Pollutions**

Whilst pollution incidents are above target and a significant area of focus for us, our Pollution Incident Reduction Plan has been delivering with a c.35% reduction in the number of incidents this year reflecting our best ever performance.

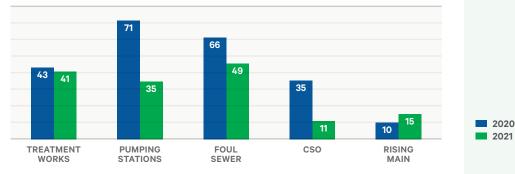


#### Cat 1-3 Pollutions (number per 10,000km network)

We continue to target improvements and performance has improved across all asset groups except rising mains which increased due to repeat incidents which arose whilst we fixed a complex issue in a sensitive area. Targeted and proactive investment in rising mains is a key priority for 2022.

#### What we are achieving so far continued

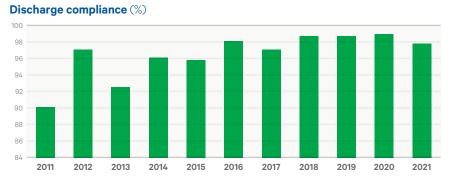
#### Pollution per asset class (number)



2021

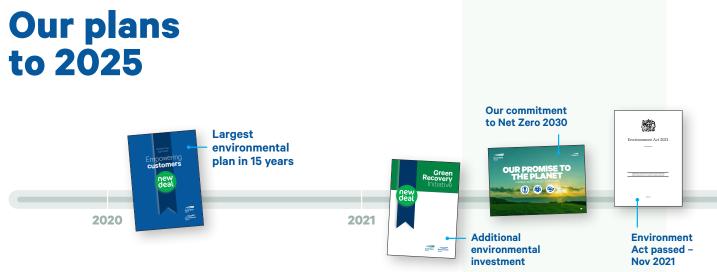
We are disappointed with the number of serious pollution incidents this year, and we have continue to implement our Pollution Incident Reduction Plan to reduce both serious and the overall number of pollutions.

#### Compliance



We have delivered improvements in our wastewater treatment works compliance over the last five years. For 2021 overall compliance of 98.1% reflects four failures at our wastewater treatment works and discharge failures at two water treatment works in the Bournemouth region which were included in this measure for the first time this year.

Two further incidents which occurred as a direct result of a third party passing changing effluent into the sewerage system are still under review with the Environment Agency to finalise the EPA. We work closely with all our trade effluent customers to ensure they are not misusing our system and we are taking action against these parties which were the root cause of these failures.



#### A New Deal: Our Plan to 2025

Our 2020-2025 business plan was developed in consultation with our customers, stakeholders and regulators. It represents a New Deal for customers, giving them a stake and a say. We were one of only three companies to receive 'fast-track status' through the regulatory process, due to the high quality nature of our plans.

A healthy environment is vital for the long term sustainability of the services we provide to customers. From the water we supply to customers for drinking, to the waterways that receive treated wastewater from customers, the impact on the environment underpins everything we do. We recognise the inherent importance of a healthy environment, and our well targeted plans mean that we will leave the environment in a better state than we found it.

A key element of our plan was our Board pledge to Deliver Environmental Leadership. This included delivering some key commitments, which have been the focus of our delivery for the first two years:

#### We will deliver environmental leadership

Our largest environmental improvement plan for 15 years to deliver region wide benefits for the environment and economy

100% wastewater compliance

Strive to eliminate harmful pollutions to the environment and reduce minor pollutions to record lows in the industry

Upstream Thinking programme improving 80% of our catchments

Targeting industry leading leakage, delivering 15% reduction from 2020

Future new water transfer to promote resilience and efficiency

Deliver our 2050 Environment Plan





#### **Green Recovery**

In July 2020, Defra, the Environment Agency, the Drinking Water Inspectorate, and Ofwat invited English water companies to play their part in the green economic recovery from Covid-19.

We responded to this challenge with a plan to increase South West Water's environmental investment to 2025 by £82 million – a c.10% increase to South West Water's existing £1 billion investment programme – with six projects focused on improving public health, protecting the environment and addressing climate change.

## £25 million to bring forward our **upgrade of Knapp Mill** water treatment works

£23 million to **increase water supply resilience** by supporting water transfers

 $\pm$ 17 million to trial ways to help customers save water, protect customers from the costs of supply pipe failures, and reducing health risks from lead pipes

 $\pm 9$  million to use nature-based solutions to reduce flood risk and enhance natural habitats

## $\pm 8$ million to reduce harm from storm overflows and improve river quality.

Our Green Recovery Initiative will provide much needed investment. It supports the creation of up to 500 regional jobs over the period to 2025, benefits the wider supply chain and provides opportunities for South West Water's existing workforce to gain new green skills. This is in addition to our previous plans for 2020-2025, which were well received by our regulator; Ofwat.



#### In recent years the environment has become one of the top issues among the public. Since developing our New Deal 2020-2025 business plans there has been a marked shift in the focus on the environment.

#### **Net Zero**

In July 2021 we launched 'Our Promise to the Planet' – carbon busting net zero plan. Our goal is to achieve Net Zero carbon by 2030. We are also proud to be an official sponsor of Race to Zero, the UN's global campaign to rally leadership and support from businesses, cities, regions and investors for a healthy, resilient, zero carbon recovery. Our Race to Zero pledge will extend the boundary of our Net Zero activities towards a 2045 target.

Our strategy is driven by: changing operational practices, focusing on selfgeneration, and reversing carbon emissions. Put simply, we are focused on how we create and use energy in the most efficient way and how we can innovatively use our local environment to reverse carbon emissions for decades to come. The activities are founded around 'three pillars' which under-pin our Net Zero to 2030 approach



- Reducing emissions through changes to operational practices, increasing energy efficiency, and switching to lower carbon fuel sources
- Meeting our commitments to reduce leaks and help customers to use less water - protecting the environment and saving carbon



Renewables

- Maximising self-generation from renewables at our sites across the South West working with partnerships and utilising our expertise
- Where we cannot generate enough ourselves to meet all our needs, 100% of the electricity we purchase will be from renewable sources



- Reversing carbon emissions from our core activities
- Working in partnership to ensure our core activities reverse carbon emissions through solutions such as peatland restoration
- Supporting the development of innovative solutions to develop low carbon footprint processes through research and development

#### **Environmental policy**

The Government's 25-year Environment Plan has an important objective of Clean and Plentiful Water. The government ambition is for at least three quarters of waters to be close to their natural state as soon as practical.

The Environment Act 2021 underpins the 25 year plan. Long-term environmental targets are the cornerstone of the Environment Act, driving governments and organisations to protect and enhance the natural world.

Key features of the Act:

- Environmental Improvement Plans, including interim targets
- Minimising damage water abstraction may cause on environment
- Reducing excessive nutrients entering our rivers and seas
- Effective collaboration between water companies through statutory water management plans
- Making drainage and wastewater management planning a statutory duty



#### Our plans to 2025 continued

The attention given to the passing of the Act by customers and stakeholders alike has demonstrated how important it is to be clear and transparent about how our current and future plans will impact on water quality measures.

#### WaterFit - our plans for the environment

Since we developed our plans a lot has happened. The coronavirus pandemic sent shock waves around the world in 2020, impacting lives, jobs, and businesses. Our designated key workers strived to ensure services to customers and communities continued and high standards were maintained.

Successive lockdowns has changed how we interact with our surroundings and shifted the relationship with the outdoors forever. As homes transitioned into offices, open spaces became gyms and nature provided comfort and solace.

The shifting relationship with the nature has been crystallised through new legislation, which seeks to deliver the government's environmental agenda. The water environment is centre stage as the need to protect this most precious resource has become ever more apparent to all.

Our existing plans to 2025 delivered significant benefits for the environment, and as a result of the changes in focus, we have looked at our outcomes through a different lens – focused on river quality and storm overflows.

Our enhanced plans on storm overflows complements and enhances the existing programme going further and faster than our original plans, delivering even more benefits for the Environment.

Through reinvesting efficiencies we have already achieved so far these enhancement investments will not increase customer bill either now or into the future. This enables us to retain our Board pledge of keeping bills as low as possible – forecasting them to be lower in 2025 than they are today.

	Compliance	Pollution reduction	Spill reduction	River & coastal water quality	Catchment management	Monitoring & reporting
FD19 Business Plan						
WINEP – Water framework directive	$\checkmark$			$\checkmark$		
WINEP - Bathing & shellfish waters	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$
WINEP - Treatment & storage	$\checkmark$	$\checkmark$	$\checkmark$			
Pollution Incident Reduction Plan		$\checkmark$				$\checkmark$
Upstream Thinking				$\checkmark$	<b>V</b>	
Capital maintenance – treatment works	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$
Capital maintenance – pumping stations	$\checkmark$	$\checkmark$				
Capital maintenance – networks	$\checkmark$	$\checkmark$				
Green Recovery				$\checkmark$		$\checkmark$
Enhanced programme						
Wastewater treatment works		$\checkmark$	$\checkmark$	$\checkmark$		
Sewer pumping stations		$\checkmark$	$\checkmark$	$\checkmark$		
Bioresources	$\checkmark$					
Data & monitoring						$\checkmark$



## WaterFit – protecting rivers and seas together

WaterFit outlines how we will protect our region's rivers and seas together. It consists of six commitments to protect rivers and seas.

We have developed WaterFit to bring together existing plans to deliver multiple benefits, as well as going faster and further with a new ambition, and our talented people and stakeholders working in partnership to improve rivers and seas in the Great South West.



WaterFit recognises that as a business, we are focused on maintaining compliance, driving environmental performance, and re-investing the benefits of efficient delivery to go further and faster.

As a beautiful coastal region, we know that quality of our seaside bathing waters are of particular importance to our customers and visitors. So as we look to focus on driving performance, we will extend our learnings and experiences to rivers – as we do our bit to make the south west the destination for water quality.

Our plans are to invest around £330 million in our wastewater assets to deliver our six commitments.





# Nurturing healthy rivers and seas

#### **Overview**

Our region is known for its long coastline and bodies of water. We need to take care over the quality of water within our rivers and seas and take steps to improve it.

There are currently fewer pollution incidents than there have been in generations but there are still too many. Tackling the root causes of the remaining incidents will help us to reduce the number of spills and pollution incidents into our rivers and seas for the long-term.



#### **Measurable commitments**

## Reduce our impact on rivers by 2025, by one third and put forward plans to target zero harm by 2030

- We will use the Environment Agency's measures of river health, known as the Reasons for Not Achieving Good Ecological Status (RNAGS). Currently 19% of the reasons for not achieving good ecological status in our region are due to water company operations.
- The accelerated delivery of the current phosphate removal schemes at wastewater treatment works will see RNAGS in the region reduce by a third to c.12%. During PR24 we will put forward plans to achieve zero RNAGS by 2030, which will require investment and innovation in storm overflow spills and discharges (namely phosphates removal), as well as investment that will be in our water resource plans around abstraction reductions.

#### Maintain our excellent bathing water quality standards, all year round, so that everyone can enjoy our 860 miles of coastline

- Recognising what we have heard from customers and communities we will focus on coastal bathing waters as our key differentiator. Recognising that our customers want to enjoy bathing waters all year round and not just in the bathing season of May to September. This means targeting the total number of spills across the whole year rather than in the summer period.
- We will target 10 spills on average at bathing waters by 2025, through targeting additional storage and asset upgrades at coastal wastewater treatment works, pumping stations, and network overflows.

## Reduce spills from storm overflows to an average of 20 per year by 2025

 Across all locations – bathing waters and rivers – we will target an average of 20 spills on average by 2025. Delivering this ambition, we will upgrade assets and increase storage at wastewater treatment works, pumping stations and network overflows across the region, as well as identifying ways to reduce surface water flows and groundwater infiltration into the wastewater network.

#### **Key investments**

#### Compliance

Compliance is our number one priority. We will continue to progress the delivery of WINEP projects including shellfish, bathing water quality and wastewater treatment (phosphate removal) schemes. We also have WINEP schemes to investigate storm overflows at high spilling or sensitive sites and increase storage at 59 wastewater treatment works agreed with the Environment Agency. These WINEP schemes will reduce RNAGS and increasing bathing water quality.

We will ensure we maintain compliance at wastewater treatment works, to meet legal standards and increased growth, including discharge compliance. This will be delivered through investment into wastewater treatment upgrades, asset inspections and maintenance.

Further to this we will continue to roll out wastewater services to the Isles of Scilly – which will protect the important ecosystems and habitats across the islands.

#### **Storm overflows**

A key focus of customer and stakeholder interest is around storm overflows.

As part of our Green Recovery Initiative, we are extending storm overflow monitors (EDMs) so that all 1,600 overflows will be monitored by December 2023, giving us important data on the number and duration of spills across the entire network.

Storm overflows can be the result of urban creep, population growth, changing rainfall patterns, network blockages, asset failure and infiltration. We use the EA's Storm Overflow Assessment Framework (SOAF) to ensure we understand the root cause of overflows, allowing us to identify the right solution to reduce spills.

We will target high spilling areas with activities including asset maintenance, sewer cleansing and rehabilitation, as we look to reduce spills caused by blockages, collapses and groundwater infiltration.

#### Pollution Incident Reduction Plan (PIRP)

Alongside our catchment plans, we will continually review and deliver our Pollution Incident Reduction Plan. Key activities include capital interventions to identify and address pollutions risk, supported by operational interventions including fast 24/7 response to early warning alerts, which are informed by predictive analytics and telemetry.

#### Delivering bathing water standards for all coastal discharges by 2025

We will continue to distinguish between coastal areas and rivers, recognising the particular importance of coastal bathing waters to our customers and communities.

Our base plans include an improvement in bathing waters. However, we are now committing to go faster and further, targeting no more than 10 spills a year on average at designated bathing waters.

This will reduce storm overflow spills by targeting wastewater treatment works, pumping stations and combined storm overflows for upgrades, delivering increased storage as well as network and treatment capacity.

### c.£282m investment

	£m
WINEP	82
PIRP	43
Other base plans	92
Enhanced programme	65





Nurturing healthy rivers and seas continued

#### **Our customers and stakeholders**

Maintaining a safe water supply and protecting public health is the number one priority for our customers. Protecting and enhancing the environment is an important part of this – improving public health involves ensuring there are no health issues due to poor quality river and coastal water.

In a recent YouGov survey:

- 83% of respondents say they have concerns about the impact of sewage pollution
- 81% of respondents agree that people largely take the management and care of freshwater ecosystems for granted.

Similarly, in the fourth quarter 2021/22 Members of Parliament ranked sewage in the top 10 issues in their post bag.

Customers have informed us that environmental issues, especially those around wastewater, are a key priority for future investments with increasing concern about the future pressures caused by climate change and population growth in the region.

Recent media coverage has shed light on storm overflows and although our research shows that customers awareness of this issue is relatively low, we expect the focus on this area to increase. Customers understand that investment is needed to fix these issues but that this will take time, as we manage the cost and disruption impacts.

#### Overall, our customers and stakeholders are supportive of initiatives to improve the quality of our water and reducing pollution incidents in the future.



### YouGov

**83%** have some concerns about the impact of sewage pollution

environmental ISSUES are a key

priority





## Putting nature on everyone's doorstep

#### **Overview**

Our region contains over a third of all the UK's bathing waters. It is important that we protect these vital recreational areas by improving the quality of our bathing waters and seeking to progress our rivers into bathing waters in the future.

We already support charitable partnerships seeking to provide health and recreational benefits to the local areas through the use of lakes and our reservoirs. Initiatives like these improve the lives of our customers and we are seeking to go further by setting commitments on bathing water access.

#### **Measurable commitments**

Make bathing water accessible, less than an hour's drive, for 100% of our residents and visitors

Provide access to our 40 inland lakes and reservoirs, so that local communities can continue enjoying them for health and recreation

#### Achieve the region's first bathing quality river, using learnings from our current pilots on the rivers Dart and Tavy

- We are in the process of installing monitors at all storm overflows on our rivers. We are also going further by piloting inland bathing water on the Rivers Dart and Tavy. We will work with stakeholders to agree stretches of these rivers to designate, and then invest in the wastewater treatment works and pumping stations which have an impact, as well as introduce monitoring to test the implications, costs, and benefits of achieving wider bathing water designation.
- This will add to the opportunities that our customers and visitors have to enjoy the regions waterways. On top of 100% of bathing waters in the region meeting environmental standards, we own 40 inland lakes which are used to capture and store water and already have over 2 million visitors, enjoying a host of activities from walking, to cycling, paddle boarding to angling.





Left Swimmers in Plymouth Right Kayakers on Roadford Lake

#### **Key investments**

#### **Monitoring compliance**

Investment into IT infrastructure and communications will help us track the quality of the water in our rivers and enable us to be proactive in reducing pollution incidents and storm overflow spills, and communicating to our stakeholders about compliance and water quality.

#### **Green Recovery Initiative and pilots**

We will invest £9m into inland river bathing water pilots at the Rivers Dart and Tavy to enable us to test the implications, costs and benefits of achieving bathing water designation and deliver specific asset enhancements where necessary to achieve these aims. Also included in the Green Recovery Initiative are storm overflow investigations across the region which allow us to understand how and where to target investment in this period and the next; and trials of sewer separation which allows us to assess the sustainability of this activity in reducing storm overflows during heavy rainfall.

#### **Our customers and stakeholders**

Our customers regularly use the water environment (beaches, lakes, rivers or reservoirs) for recreational purposes and support the protection of the local environment and measures to improve biodiversity. Steps to improve water quality, boost nature, and provide readily accessible recreation spaces is important for customers' physical and mental wellbeing.

#### **South West Lakes Trust**

Our lakes are located across the South West, capturing and storing rainwater, providing special places for people to explore, and home to a range of wildlife. We established the South West Lakes Trust as an independent charity to be stewards for our sites, making sure there is lots to do at the lakes – archery, sailing, windsurfing and kayaking – and protecting the sites for generations to come.

Each year we provide the Trust with c.£1m to manage and invest in facilities and land at the lakes, to make leisure and recreation activities available to all visitors.



### **C.£8m** Green Recovery investment

Tavy

Dart

### 123456

## **Creating and restoring habitats**

#### **Overview**

Over the past decade we have been working with our local farmers and landowners to help create more sustainable farming practices and reduce nutrient run-off and pollutions into our rivers and streams.

We have used a variety of methods on a catchmentby-catchment basis in order to achieve our collective goals. These include nature-based plans such as, peatland restoration which has wide benefits on the local area and society as a whole. Peatlands are critical in preventing floods, ensuring safe drinking water and reducing climate change. Peatlands are the largest natural terrestrial carbon store and store more carbon than all other types of vegetation in the world combined<sup>2</sup>.

#### **Measurable commitments**

# Stop pollutants from 120,000 hectares of regional farmland getting into rivers and seas by 2025, working with local partners

- To deliver our PR19 and Green Recovery plans, we will continue working with farmers and partners right across the region to continue to develop and implement nature-based solutions. We will provide advice and grants to improve farming practices and infrastructure, in turn improving water quality in rivers and lowering the need for costly, carbon intensive, investment at our water treatment works.
- We will extend our catchment management activities to the Camel and Axe catchments to support efforts to reduce nutrient pollution in these sensitive areas. Nature-based schemes alongside accelerated investment at our treatment works can support the health of rivers, in turn unlocking development, which is important for Levelling Up.

# Restore an additional 1,000 hectares of peatlands by 2025, to create new habitats, improve river quality and reduce flooding

- We are expanding our catchment management programme to include peatland restoration focusing on areas with some of the most severe damage and degradation.
- Peatland restoration is a multi-benefit activity. As well as naturally filtering river water quality used for drinking water, it alleviates flooding risk and enhances biodiversity, and is an effective carbon sequestration activity, hence supporting our Net Zero strategy.

#### Plant a quarter of a million trees by 2025, to help combat climate change, support river health and create new wildlife habitats

- Trees provide both environmental and wellbeing benefits. They help combat climate change, improve water quality, reduce flooding, enhance biodiversity and add to the natural beauty of our region.
- In 2019 we announced plans to plant 100,000 trees by 2030. This target was passed by June 2021, so now we have set a new target to plant 250,000 trees by 2025.

<sup>2</sup> IUCN (2021), Peatlands and climate – www.iucn.org

#### **Key investments**

#### **Nutrient neutrality**

Nutrient pollution disrupts the ecosystems and damages wildlife. When rivers are classed as 'Unfavourable' under Habitats Regulations, then steps are needed to address the sources of nutrients from wastewater treatment works and agricultural pollution; and local planning authorities must assess the environmental impact of new development on these sites and only allow development that is nutrient neutral. This means the nutrient load created through additional wastewater from the development must be mitigated, such as through new wetlands to strip nutrients from water or creating buffer zones to revert to nature.

More sites have been designated as unfavourable in 2022 across the UK, many of which are important areas for Levelling Up, including the Axe and Camel catchments in our region. We will accelerate existing investment in these catchments to remove phosphates from wastewater treatment, and work with local stakeholders to implement nature-based solutions that reduce phosphates in rivers. This will enable developments to proceed, benefiting the local communities.

#### **Catchment management**

Our pioneering catchment management is fundamental for addressing the most serious environmental challenges we face.

We will continue our proactive work with farmers to reduce agricultural impact on river quality, which today accounts for 46% of the reasons for poor river health (RNAGS) in our region. To date, 95,000 hectares have improved since 2015, working in 80% of our catchments and with 1,700 farmers. These activities reduce fertiliser and slurry run-off into rivers, protecting rivers important for drinking water supplies. We will continue our plans, with a further 30,000 hectares of catchment management undertaken by 2025.

Under our Green Recovery Initiative, we have expanded catchment management across Dartmoor National Park. This includes peatland restoration – on 1,000 hectares of the most severe damage and degradation in the park.

We are also well advanced with plans to plant 250,000 trees by 2025. We will work with key partners to plant trees on land identified – including our own land and that of our partners such as the Wildlife Trusts, working within the Forestry Standard.

### Bio-resources – Farming Rules for Water and the Industrial Emissions Directive

Important revisions have been made to the rules and standards around the treatment and disposals of biosolids (which is the product produced after treating sewage). We need to invest in our biosolid sites in order to maintain compliance with recent rule changes.

Biosolids are a rich source of nutrients and organic matter that can nourish soil – serving as a valuable fertiliser for the farming community. The EA sets out its Farming Rules for Water which recognizes the benefit of biosolids to land whilst looking to protect the quality of our rivers.

### c.£32m investment

	£m
Catchment management	12
Bio-resources	18
Nutrient neutrality	2



#### Creating and restoring habitats continued

The rules aim to reduce run-off of fertilisers from fields into streams and rivers by limiting when farmers can apply them to the time of year when the crop needs them to grow. It restricts when biosolids can be used by farmers, meaning we will need to store the treated biosolids when we can't spread them, and produce a more solid fertiliser to reduce the likelihood of run-off.

#### **Our customers and stakeholders**

Customers see planting trees and restoring land and peatlands as an important part of any sustainable plan. This is seen as a long-term solution to climate change, as well as providing more local benefits such as preventing flooding, providing habitats, and providing amenity.



**Combe Martin** 

#### **Case study**

#### **Even cleaner seas for Combe Martin**

Combe Martin has faced potential declassification for bathing water due to bacterial pollution – which was of concern as the local community depend on the beach and bathing water quality to attract visitors. The partnership has delivered a nature-led approach to reducing flood risk and increasing water quality and biodiversity in the catchment.

The River Umber flows into the sea at Combe Martin beach and can affect bathing water quality, especially during wet weather. We have created woodlands to protect the River Umber from bacteriological run-off from the steep-sided valley. Planting thousands of native trees and hedges in the catchment intercepts peak flows of rainfall in the valley, improving both soil health and water quality.

We have worked proactively with farmers to provide advice on soils and waste management, resulting in a decline in fertilizer and slurry run-off into the river.

These catchment actions complement wastewater improvements – including the construction of underground storage tanks to reduce the number of storm discharges into the River Umber during extremely wet weather.

These combined efforts with the Environment Agency and local community has successfully improved the bathing water in Combe Martin, benefiting the community and visitors. "I recognise and value all the work that is being done to improve water quality... The coordinated work of the local community, South West Water and the EA is a great example of what can be achieved."

**Environment Minister Rebecca Pow MP** October 2021, in letter to Selaine Saxby MP WaterFit - protecting rivers and seas together continued



## Inspiring our local champions

#### **Overview**

We support local communities who aim to increase the health of our rivers and bodies of water.

We believe it is important to educate people on how we can be more environmentally friendly with our water use, so we will support outreach programmes that target schools and the local communities.





#### **Measurable commitments**

Donate 25% of our Community Fund to local groups that share our passion for river and sea health

Launch our WaterFit Warriors programme, to inspire thousands of water quality champions in schools and communities across the region

Share progress with our customers through our unique WaterShare+ scheme at quarterly public meetings and our annual Customer AGM

#### **Key initiatives**

Our donation of 25% of our community fund will enable local groups to invest and educate the community on river health and help us achieve our aims of creating a sustainable future.

The Environmental Warriors Outreach Programme will help to educate communities across the region on the importance of water usage and how we can all take steps to become more environmentally friendly and reduce our water consumption. Climate change is a collective issue and something we should be working on together with out customers in order to achieve a better world for future generations.

#### WaterShare+

An important part of our New Deal is to empower customers – with a say and a stake. This is delivering for customers lower bills, further investment and more of a say in how South West Water is run.

The voice of the customer is enhanced through our WaterShare+ scheme. We have an independent WaterShare+ Advisory Panel which protects the interests of our customers. The Panel meetings are held quarterly, where possible in public across our area of operation – customers have the chance to attend and interact with the Panel. This means we can receive feedback on our initiatives and share the progress with our customers.

#### **Our customers and stakeholders**

These pledges will help to educate customers on how they can help protect our valued water ways, and gives customers transparency about our plans and progress. Our customers are very supportive of initiatives to improve the environment and this pledge gives more power to our local community groups to help us achieve these initiatives. WaterFit - protecting rivers and seas together continued

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### 123456

## **Creating a sustainable future**

#### **Overview**

South West Water is campaigning for measures to ensure that only things that go down the drains are the three Ps – paper, poo and pee. When plasticbased wet wipes are flushed down the toilet or cooking fats and oils are put down sink, these buildup in the sewers causing blockages, flooding and pollution.

Our analyses show that blockages commonly build up in tourist areas. We need to educate visitors as well as customers as to how to avoid blockages and alleviate some of the stress on our sewer systems. We will work with our local partners to look to understand how best to engage customers and visitors about this.



#### **Measurable commitments**

Work collaboratively on the building of new developments in our region, to help us manage our network

Back the ban on non-flushable or plastic-containing wet wipes, to help prevent blockages

Work with our 10 million visitors, and 2.3 million customers, so they understand the important role they play in protecting our region, through our Love Your Loo campaign

#### **Key initiatives**

Education and influencing around responsible sewer usage can make a significant difference by preventing pollution and flooding to rivers and seas, today and in the future.

#### **Sewer flooding**

Sewer flooding causes a lot of distress to local communities and is something we work hard to prevent. The reasons for sewer flooding can be due to weather (exceptionally long period of rainfall for instance) or blocked sewers.

We deal with thousands of blocked sewers a year – the cost of this is added to customer bills. This is predominantly due to people flushing baby wipes, hygiene wipes, cleaning wipes, cleansing pads and sanitary products. It is easily avoidable and through education it can be reduced.

#### Sustainable development

We want to support development in the region: it is an important part of Levelling Up. But it is important that homes and businesses are correctly plumbed into our networks, and not connected to the surface water system which discharges into rivers or streams without treatment. The Government estimates that up to 2% of homes have at least one misconnection (an appliance, sink or toilet) to the drains that should receive rainwater only. Each one of these misconnections means that items disposed of down the drains such as wet wipes and sanitary products are released directly into rivers and the environment – as they avoid the screening provided by the foul sewer network. This is another reason why we urge customers to only put the 3Ps down toilets and sinks

#### **Our customers and stakeholders**

Reducing pollution and sewer flooding is a top priority for customers. Despite this, one quarter of our customers admit that they flush nonflushable items. Given that most pollutions and flooding events in our region stem from blocked sewers, customers are rightly supportive of further information and education on how to use the wastewater network responsibly.





023456

## Putting people in control

#### **Overview**

Storm overflows have been an important topic of debate in recent months. There has been a strong push for companies to be more forthcoming with data about their impact on the environment. At South West Water we want to provide our customers with real-time information on river quality, our treatment works and storm overflows. This will help our customers to hold us accountable and push us to be more environmentally friendly in the future.

c.£8m

in monitoring and open data

#### **Measurable commitments**

Work with partners to provide water quality information for residents and visitors, making it easily accessible on our website by the end of this year

Help people understand river health, by sharing realtime river water quality information, just as we do for our bathing waters, by 2023

Provide 100% monitor coverage at our treatment works and on our storm overflows, by 2023

#### **Key initiatives**

We are introducing increased monitoring into our rivers and sewers as well as IT infrastructure to support our reporting and communication from the monitors.

This increased transparency will allow our customers to hold us to account on our performance and will allow them to make informed decisions on their recreation. It will also help us understand our impact on the environment in real-time and enable us to find solutions to problems. The investment into monitoring technology will also enable us to demonstrate our compliance with environmental commitments.

#### **Our customers and stakeholders**

Customers are interested in our performance, but our research shows that our direct impact on the environment, both positive and negative, through our core and non-core activities is not widely known or understood by our wider customer base. Our commitment on transparency will help to combat this shortfall.

Ofwat's recent publication "Final Public Value Principles" reiterated this view towards companies becoming more transparent about our environmental impact. We intend to take this into account and do our part in becoming more transparent and accountable on our impact on the environment.

WaterFit - protecting rivers and seas together continued

southwestwater.co.uk

# **Confidence** to deliver

# Assessing the risk and performance of our assets

# The scale of the challenge

Our network and systems of assets is vast. We have over 19,000km of pipes, 1,200 pumping stations and 1,600 storm overflows which play a vital role in taking sewage from homes and businesses to one of our 651 wastewater treatment works for treatment, in order to protect over 600 water bodies across the region.

Over time what is being demanded of our assets is increasing. We have seen the population increase by 20% since privatisation, with a 50% increase in tourism over the last 15 years and an increase in flows treated by 25%. At the same time, what goes into the network is changing, millions of wet wipes are flushed every day into our network, causing blockages which in turn cause pollution and sewer flooding. And, we expect these challenges to increase, due to changing weather patterns, further urban creep and population growth.

Assessing the risk and performance of an asset base of this scale, requires a consistent, systemised and well governed process, supported by.

- **Better data** from investigations, pilots, telemetry and monitors across the network. Providing the real-time information on what is happening across our vast network, allowing us to closely track performance.
- The right people, tools and skills to assess the risk of our assets now and in the future. Providing a better understanding of what this means for customers, communities and the environment over time, so that we can know when and how to intervene to address that risk.
- The right supply chain to deliver efficiently and effectively.

# Our systemised approach

Understanding and monitoring the risks to service from our assets is a key component of our planning processes, documented in our "Asset Management Policy".

We continually collate data and insight to refresh our understanding of the risks from our assets – including the likelihood that something will go wrong (i.e., probability) and the assessment of the impacts on customers and the environment if it does occur (i.e. consequence).

Intervention strategies are based on these risk assessments. These set out the triggers for investment – namely at what point compliance or delivery of our business plan targets is at risk from the assets, and what we need to do about this to bring the risk back to acceptable levels.



High

Our network is **19,000km** – equivalent from here to Australia

# 50% increase

in tourism and 25% increase in flows treated over the last 15 years

### **Our Asset Management**

**Policy** sets out for our talented people and wider stakeholders how we operate, maintain, replace and upgrade our assets in the right way at the right time, using evidence to drive decisions. Our Policy:

- Ensure compliance with legislation, regulatory and statutory requirements and other company policies
- Take account of the views and preferences of customers and stakeholders
- Continue to enhance our capabilities and processes
- Ensure we have the right data to underpin our plans.

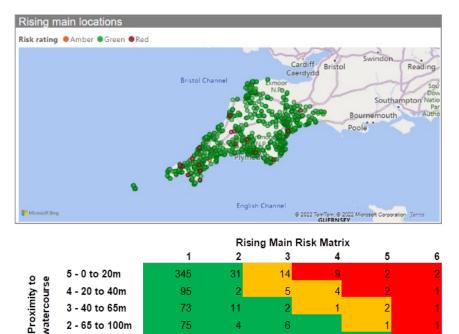
# Our adaptive planning – Rising mains

Asset performance is tracked, reported and continually utilised in our dayto-day decision making.

We routinely assess rising main risk. If the risk from any rising main is too high, we look to reduce the risk by either:

- Reducing the probability of these bursting typically this means replacing the asset
- Reducing the consequence if these burst typically this means ensuring a fast and appropriate operational response, where this can be effective

Many factors drive the assessment – the age and condition of the pipe, its material, soil conditions, network configuration, and recent performance (i.e., has it had any recent issues). Consequence is assessed using the asset's proximity to any watercourse to assess our propensity to pollute or cause harm to the natural environment. This is depicted below.



1 - 100m+ Note: numbers shown indicatively

The vast majority of our risks are scored as Green. However, there are some that are amber and red – which present a risk to service.

14

10

560

Our aim is to have well managed risks. "Red risks" have a high risk of burst – whatever the proximity to a watercourse, these need to be replaced. Amber risks involve a mix of replacement or, for those with a low burst rate, enhanced monitoring and oversight.

We have over 30 rising mains that are scheduled for replacement over the next three years. These will deliver reductions in risk and improve performance, particularly driving down the risk of pollution incidents.

#### **Prioritising our investment**

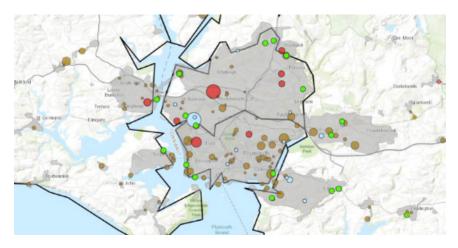
In 2021 a rising main in Crantock started to present an issue. At 50 years old the asset still had some years of useful life left, and until 2021 it had an acceptable level of risk. But over the summer of 2021 a short series of bursts occurred, which moved our scoring of this asset quickly into the 'Red' risk category, meaning that it presented an unacceptable risk, and it was scheduled for replacement.

Whilst this change in burst risk was not foreseen, our dynamic assessment updated based on the failures meant it was reprioritised for replacement to reduce the risk position back to an acceptable level.

# **Catchment level asset plans**

We use our Drainage and Wastewater Management Plans (DWMPs) to identify and assess risks across our network.

DWMPs are developed using tools and data which allow us to predict current wastewater network risks and how they may change over time given climate change, population growth and urban creep. We use this to prioritise our investment plans and to work with stakeholders in the catchment to work to address issues together.



Our analyses shows that pollution, sewer collapses, blockages, sewer flooding, and storm overflow spills are often trended together as they are driven by the same underlying root causes, such as ageing assets or too much rainfall for the system. This means that well targeted investment can deliver multiple benefits.

Looking at risk across a catchment level means we ensure that the right solutions are identified which tackle multiple issues, and by doing so, we can be confident that we are delivering the greatest possible value to customers.

An important part of this is the views of customer and communities. One way that we could prioritise investment would be to focus on reducing storm overflow spills as fast as possible, especially given the increasing public attention on the total number of spills there has been. However, our engagement so far is indicating that this may not be right, and that our investments in coastal bathing areas may need to come first – even if these are not the ones that give the biggest headline change in performance. The key to our plans will be to reflect and address what will really make a difference to lives and wellbeing of our customers and stakeholders.

#### Asset Management Maturity Assessment

South West Water scored as one of the leading companies across the majority of the assessment areas in Ofwat's recent Asset Management Maturity Assessment. The assessment was undertaken to provide a window into current asset management and decision-making approaches used in the sector.

"South West Water uses several catchment planning frameworks... which take a systems-based approach to catchment planning. They feed into the needs and solutions database and provide consistent evaluation of direct and indirect consequences." Ofwat 2021

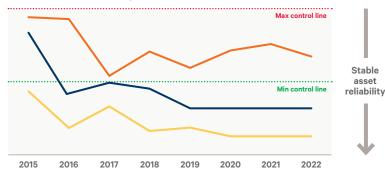
# Maintaining stable levels of service

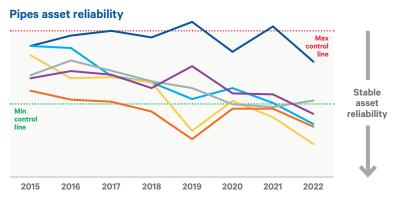
Over time we have improved asset reliability and made good progress with delivery of performance targets. Overall performance against our regulatory metrics is generally going in the right direction and is encouraging. But there is more to do and our catchment asset plans will continue to drive performance down in all areas.

We have measures that measure the reliability and service capability of our assets. We have Minimum and Maximum Control Lines – above which means reliability is getting worse, and below which means it is getting better.

Each of our measures is trending down over time as we invest in our assets and networks – showing how reliability of the asset base is improving.

#### **Process asset reliability**





As we target Net Zero by 2030, we are enhancing our understanding of carbon in our business and processes, so that we can optimise our assets and embed carbon into our decisions. This is an important part in helping to achieve our strategy for Net Zero.

We have seen the benefits of our ISO55001 accreditation. This has demonstrated that our dynamic capability is strong, but has provided further opportunities for benchmarking and shared learnings that support our continual improvement strategy.

Importantly, all of this is supported by the talented people with the right skills and culture. We know from Pennon Group research that we are a Great Place To Work, but our location in the South West can sometimes make it harder to attract good talent from other parts of the country. As such, we continue to focus heavily on skills, competencies, training and mentoring as we plan for the long term around our people.

#### STWs unplanned maintenance

- LUT compliance
- Numeric compliance

#### - Pollution incidents

- Floodings other causes
- Equipment failures
- Sewer blockages
- Sewer collapses and rising mains bursts
- Floodings sewer capacity

#### Robust asset management processes

We have continued to improve our data, systems and processes. We have recently achieved accreditation to ISO55001: Asset Management Standard, and Ofwat's findings in the recent Asset Management Maturity Assessment (AMMA) showed that we have the right processes, teams, procedures and culture in place to monitor and manage the health, performance and resilience of our assets.

# Supply chain and delivery

We have a well-established and robust supply chain. This allows us to deliver our plans, accelerating investment for the benefit of communities.

In developing our WaterFit investment plan, we have recognised the benefits of strengthening our supply chain frameworks this year, providing sustainability to our partners' workforce to ensure that we have the capacity and capability needed to go further and deliver more effectively and efficiently.

By having a clear understanding of our programme of works, utilising our well-established processes and our mature supply chain relationships we are well placed to respond to the challenge and deliver effectively and efficiently to the benefit of our customers and the environment.

## **Our processes**

We focus on partners that know our region, and whose values and purpose mirrors ours – whether that be local or national partners.

Our partners work with us in a collaborative way to drive efficiency, share best practice and ensure we are delivering the best solutions for customers, colleagues, and the environment. All large contracts are let on a 'Design and Build' basis for greater clarity, accountability and strong oversight.

We use a mix of suppliers each best placed to deliver efficiently their packages of work alongside our own established internal teams working in an 'End to End' process that starts from business need and ends with benefit realisation to ensure we are delivering for customers.

Our End to End process provides visibility of benefits realisation at each of the key stages in a project lifecycle:

- Inception / evaluation
- Scoped solution
- Project delivery
- Post-project review

The evolution and realisation of cost, delivery and benefit assumptions are tracked through each stage of the delivery lifecycle. These insights have informed our plans in terms of the overall planning process, reliability and cost of solutions, optimum delivery routes and effectiveness of the wider supply chain.

In particular, our post project realisation process has been invaluable in validating the relationship between solution development and benefits delivered by testing delivery assumptions at each stage gate within the delivery process against those actually delivered by each project. We are using this relationship to continually better inform our benefits appraisal within our planning processes.

#### **Our partners**

Forward planning of the supply chain means that we have established partners, embedded in our way of working and successfully delivering our investment programme. Utilising partners with roots in the region mean we can secure the resource needed and keep the economic benefit of our programme in region as far as possible.

Investment focus	Delivery
Strategic consultant	Bringing technical expertise to support the delivery of our Business Plan: Stantec
Major projects	Large Capital investments predominantly in the non- infrastructure area, delivery of new and upgraded process plants: Galliford Try, Kier
MEICA projects	Projects in the range of up to £5m delivering mechanical and electrical installation of repairs and renewals on process plants: Tecker, Northavon, Kier
Planned infrastructure renewal	Renewal, by relaying or repair of both clean water and wastewater pipelines: Glanville Environmental, Kier, R&M
Reactive infrastructure	Carrying our reactive and emergency repairs to our clean and wastewater networks: Kier
Upstream Thinking	Using our relationships with University of Exeter, Devon and Cornwall Wildlife Trusts, Westcountry Rivers Trust to further explore the opportunities and benefits of nature-based solutions

# **Operational plans and culture change**

Our operational strategy and approach for the reduction in storm overflows follows the same principles as in the PIRP. A twin track approach of focusing on data, telemetry and 24/7 review and operational response alongside additional investment.

The reduction in spills from storm overflows is being delivered by a Storm Overflow Reduction Task Force who meet daily. This is overseen by an Executive-led Storm Overflow Board that meets weekly to review performance and delivery.

### **Data and telemetry**

The strategy for monitoring storm overflow performance is to increase our focus on real time data led assessments and achieve 100% of certified sitebased monitoring at our storm overflows by the end of 2023.

All of our data is received from telemetry on our EDMs enabling real time review of data, 24/7 by our operational teams for response as appropriate.

Our Storm Overflow Reduction Task Force undertakes operational reviews of flow and spill data daily, identifying asset performance issues and liaise with operational staff to attend site and rectify problems. Our investment in new CCTV at storm overflow locations will further improve the speed and accuracy of investigation into storm overflow events.

Every overflow spill that has been recorded is checked individually using a computer software program that provides trended analogue and digital signals from site. Quality checks are carried out by a dedicated EDM maintenance team to ensure spill data is being accurately recorded.



### Confidence to deliver continued

Our Storm Overflows Task Force monitors intermittent discharges and reviews EDM data daily, with each overflow being checked manually using a computer software program that provides trended analogue and digital signals from site. Where spills have occurred, these are reviewed, investigated and responded to as appropriate. Performance issues that need immediate remedy, or which can be rectified quickly, are flagged to our EDM maintenance team who rectify issues identified in line with our reactive delivery processes. Other issues are investigated and put forward into our asset management systems for proactive intervention.

Storm overflow data is also being used to enable enhancements to be made to our wastewater hydraulic models to enable live real time review of data across our catchments. These models will collate all of the data and information being provided from the additional telemetry, sensors and flow meters currently being installed to provide real time visibility of the asset health and performance of our network and catchments. These models are being used to help inform immediate investment plans and longer-term plans in PR24.

#### **Operational management**

We have a data led philosophy, which uses all current data and site level knowledge to make informed decisions. This continual, bottom-up assessment is applied to all storm overflow spills daily. It is used to provide alerts and inform performance, provide triggers for investigation or action, provide data points for the identification and reporting of pollution, as well as informing and/or escalating investment plans. In this way our processes allow for the timely escalation of risk to the right decision-making levels.

Our operational response is always evolving to better utilise data improvements. For example, many sites have been set up with 'smart' alarms as they are otherwise known, which activate on a high wet well level and low flow. These predictive alarms generate actions to resolve, which may involve sending an operator to site and are very successful in preventing permit non-compliance/ pollution. We have embedded this type of asset intelligence in our business process already and recognise the need for future flexibility to accommodate technology of this nature.

#### How we respond to storm overflow events

Our strategy for monitoring and maintaining the continued resilience of our assets and systems to minimise storm overflows, is based on having insightful and meaningful data from our asset base to make informed decisions in real-time where possible.

A good example of this is the work we have completed in the last 12 months as part of our PIRP where we have been using new approaches to overlay the data received from our telemetry with weather data to proactively respond to potential issues. This work has included Meniscus, a new storm overflow dashboard and sewer depth monitors resulting in the proactive review of data to prevent potential harm to the environment (c. 13 pollutions have been prevented since applying this enhanced approach).

Any frequent spilling storm overflows, or those at risk of causing environmental harm are being investigated either as part of the SOAF process or through a quicker fast track process to enable quicker resolution of less complex solutions. Our strategy is to always tackle storm overflows causing environmental harm and reduce high spilling storm overflows as soon as practically possible.

#### **Real Time Data Monitoring**

South West Water has consistently been committed to be open and transparent, sharing data and information with customers, stakeholders and communities. A key pillar of our approach to openness and transparency has been the creation of our WaterShare Panel meeting which is held in public with customers. These meetings have already included many discussions on environmental performance including storm overflows.

With all of our EDM data being received via telemetry we are able to receive data in real time. In addition to our BeachLive platform providing data all year round on the quality of bathing waters in our region we intend to develop a platform for the sharing of spill data at of our EDMs by 31 March 2023.

Relevant data from storm overflows will be provided to stakeholders in a format and time consistent with their expectations. Through our Green Recovery initiative we will engage with stakeholders and customers to develop the information they require and how they would like to receive this. This may require the installation of water quality devices at storm overflow discharge locations. We will collaborate with the industry and in particular through our joint venture with the University of Exeter Centre for Resilience and the Environment, Water and Waste (CREWW) to innovate and develop resilient water quality monitoring devices.

# Innovation

We need to be resilient to the changes that are happening around us and also to meet the major challenges asked of us by our customers and Government. To do this we need to not only continuously improve our processes and quality of our services, but we need to actively seek new solutions that have far-reaching and cross-cutting benefits. For example, solutions that deliver a step change in reducing carbon emissions, delivering environmental improvements, securing a resilient service and/or, where possible, lowering our costs.

Continuing to do things as we have done before, is no longer an option to meet our stretching ambitions and to rise to the increasing challenges and expectations our environment, customers, regulators and society have of us.

The start of our change in innovation, is CREWW. It is both a collaborative research centre and programme of activity set over a 25-year partnership term, that will see more than £20 million of funding from South West Water invested in to cutting-edge research services, equipment and facilities.

CREWW sits alongside a number of routes to innovation that we use to ensure our innovation activities are appropriate for the type of innovation being explored and that they deliver quickly for our customers.

For example, the Ofwat Innovation Fund enables the sharing of data, knowledge and experience between water companies, partners and the supply chain, to accelerate the delivery of transformational innovation. We are successfully working with partners on a number of Ofwat innovation projects which will improve our real-time response and control of the network, and further innovate around low carbon wastewater treatment methods.

# Financing our plans

Our plans from now to 2025 will see us invest around £330 million in our wastewater assets and activities to deliver both our base programme outcomes as well as improvements for our rivers and seas.

The efficiency we have delivered across totex and financing in 2020 and 2021 means we are able to reinvest in delivering improved outcomes for the environment without impacting customer bills.

# **Delivering outperformance**

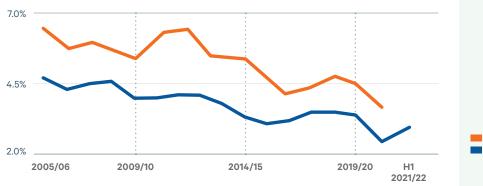
Over the first two years of the regulatory period we have managed our programme to deliver our regulatory investments efficiently – accelerating investments to deliver our outcomes early, such as Bathing Waters, as well as increasing expenditure in areas of focus including pollutions.

Efficiencies have been delivered through:

- Identifying innovative ways to deliver our targeted outputs
- Supply chain savings procuring packages of work to deliver efficiency and build on lesson learnt
- Operational ways of working and driving productivity.

In addition, South West Water's capital structure and mix of funding instruments continues to deliver efficiency and we have one of the lowest effective interest rates in the industry – delivering financing outperformance.





The outperformance we have delivered is providing headroom for further investment and sharing benefits with customers including:

c.£82m accelerated and additional spend on Green Recovery Initiatives – includes river water quality c.£45m reinvestment of efficiencies to enhance coastal and river water quality



# c.£150m outperformance

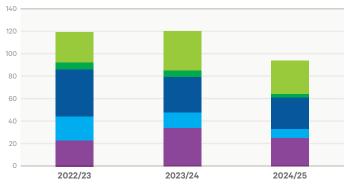
H1 2021/22	£m
Totex	94
Financing	60
ODIs	(10)

Water sector

# **Our wastewater investment to 2025**

We plan to spend around £330m over the next three years reflecting our base business plan investments, our Green Recovery programme as well as an enhanced programme for our rivers and seas.

# Wastewater investment to 2025 $({\rm \pounds m})$





These investments deliver a significant number of specific interventions – in addition to other investments to deliver asset health, respond to customer and meet additional supply demand requirements across the region.

Interventions (number)	2022/23	2023/24	2024/25	
Wastewater treatment works	243	134	88	Enhanced treatment and storage capacity at works
Sewer pumping stations (SPS)	49	26	22	Upgrades including variable speed drives to pump stations
SPS MOTs	1,208	1,208	1,208	Annual pump station MOT and defect resolution
Rising mains	18	12	6	Proactive replacement of highest risk rising mains
SOAF investigations	66	42	-	Investigations into the highest spilling and impactful storm overflows to inform current and future investment plans
EDM monitor installations	293	121	-	Completing the roll out of all remaining EDMs – 100% coverage by December 2023
Sewer depth monitors	3,000	3,000	3,000	Deployment of sewer depth monitors for early warning
Total	4,877	4,543	4,324	

WaterFit commitments	£m
Nurturing healthy rivers and seas	282
Putting nature on everyone's doorstep	8
Creating and restoring habitats	32
Inspiring our local champions	*
Creating a sustainable future	*
Putting people in control	8

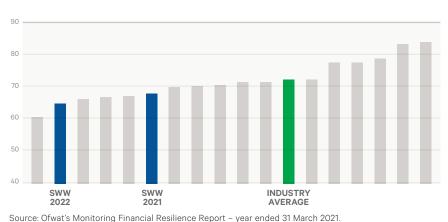
\* Capital investment is not required for these commitments

# **Robust balance sheet to finance investment**

We continue to have a strong capital structure and target a mix of funding instruments to finance our activities efficiently – and are less exposed to high inflationary increases than other companies.

South West Water continues to have one of the lowest effective interest rates across the industry with our mix of fixed, floating or index linked debt. This is supported by the Pennon Sustainable Financing Framework in place since 2018 and 100% of our new funding in this regulatory period has been secured under this framework (around £170m).

South West Water is also well positioned within the industry with gearing at the lower end of the range and significantly below the industry average for 2021.

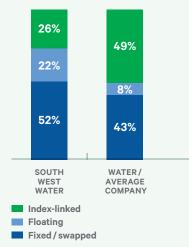


Industry gearing (% net debt to RCV)

Our business plan set a reducing gearing profile and to further enhance our

already strong balance sheet position South West Water's parent company and shareholder, Pennon Group plc, has injected £45 million of equity into the business this year, reducing gearing giving greater financial resilience.

## UK Water Gross debt mix



# Working with local stakeholders and communities

At South West Water we believe we have a unique role to play in supporting the lives of people and places they love for generations to come.

We engage with a wide range of stakeholders to understand their perspectives, and where possible, to jointly deliver for the environment.

We have taken a phased approach to rebuilding trust and articulating our plans to improve water quality in our region. Our three phases have been firstly to acknowledge and listen, secondly to build our plans and gather feedback and thirdly to build a legacy for future generations.

### Phase 1

# We have been engaging customers in the environmental debate

Customers today have multiple opportunities to share their views, whether through social media, regional press or as part of community groups.

## WaterShare+

Our independent WaterShare+ Customer Advisory Panel has made our environmental performance and plans a priority. Our unique scheme encourages public attendance to meetings, allowing customers and stakeholder groups to come and discuss their needs and priorities and our plans.

### Local MPs

We have welcomed the ongoing dialogue and site visits with South West MPs. From these meetings we can understand what individual communities needs from the water environment, and how we can help support the economy and environment of the region.

We have been attending lots of community events, such as local council and parish meetings. These provide incredibly valuable insights into local needs and the level of support communities need.

# Phase 2 Sharing our plans

We started Phase 2 of our engagement strategy with the launch of WaterFit and the start of a 12 week campaign of consultation.

We know that WaterFit encapsulates what customers and communities want. But we want to ensure our prioritised plans are well timed, delivering the highest priority outcomes first.

We know that we need to engage and listen through a range of forums. Our approach involves ensuring that we maximise reach – using direct methods, media platforms, and local events.



- Direct messages to customers we have already emailed all customer accounts about WaterFit, and we are shortly sending out the next edition of our customer magazine, Let's Talk Water, to all households across the region in May 2022
- Updated website and proactive social media campaign developing a new hub which keeps customers informed and updated
- **150 community outreach events** are planned and will be delivered across the region
- Our Value of Water Education Programme looks to engage with primary schools across our region promoting the value and importance of water and how everyone can do their bit, encouraging everyone to become WaterFit Warriors.









# Phase 3 Looking forward

Looking even further out – we need to build a legacy. We want to do our bit to make sure that the South West is the destination for water quality.

But we cannot do it all alone. We need to engage communities and visitors on how to do their bit – focus on reducing blockages in the network which cause harmful pollution incidents and spills.

Our teams will continue to engage and listen to communities as we continue to shape WaterFit in the future for all.

# What our customers think about WaterFit

April 2022 Focus Groups, conducted by ICS

In early April we tested the WaterFit commitments in a series of focus groups. 100% of participants said they support WaterFit!

- All customers considered WaterFit to be acceptable, with two thirds finding it very acceptable.
- Customer support was strongest for the commitments on coastal bathing water and reducing spills from storm overflows.
- Customers considered WaterFit to be comprehensive and whilst customers were particularly interested and focused on the coastal water improvements that would be delivered, they welcomed the focus on rivers and lakes
- Most customers recognised the wide benefits that will be delivered from the plan, including the impact on the economy and jobs, and the impact on health and wellbeing
- Customers want to see WaterFit communicated widely across customers and communities



"I think it's fairly comprehensive, I can't think of anything that is missing. It is good to see that they are thinking about it and are exploring different avenues."

SWW customer, Male, C2DE, Aged 18-45

> "I do go in the sea, no issues whatever, jump in, go under, and I love it." SWW customer,

Female, ABC1, Aged 18-45



# Looking forward – beyond 2025

The South West, with its combined characteristics of low population density, high coastline to land area ratio and tourism-based seasonal flux on water demand, presents a unique set of challenges.

Looking forward we need to continue to deliver WaterFit for customers, communities, visitors and stakeholders.

As we horizon scan and assess future uncertainties, we know we need to prepare for even more change, as climate change, population growth and urban creep continue to put pressures on our waterways and our network.

So whilst we are busy working on discussing and delivering current plans, we are also getting ready for our future plans.

We are currently developing:

- Our water resource plans for the next 25 years
- Our drainage plans for the next 25 years
- Our five-year business plan covering the period 2030-2035.

## **Future challenges**

According to the 2021 Intergovernmental Panel on Climate Change (IPCC), we are already experiencing many climate change impacts today, and these are expected to increase, anticipated to be at least 1.5-2°C above preindustrial levels this century, and with a chance this might go higher. We are already starting to observe the impacts of drought, rising temperatures, flooding, rising sea levels and storm surges, and coastal erosion on our operations.

That's why, in 2021, we signed up to our own "Promise to the Planet", our Net Zero plan to 2030, with three pillars centred around sustainable operations, championing renewables and reversing carbon emissions, we are on track to reduce the demands we are making on the planet.

The impact of increases in global temperatures will potentially lead to larger and longer droughts, more intensive periods of rainfall and sea rises, all of which could pose a varying degree of risk to the services and supplies to South West Water customers.

The South West is particularly vulnerable to climate change, given its 860 miles of coastline, and adjacency to the western approaches of the Atlantic Ocean, exposing the area to impacts from rising sea levels and storm intensity. Given this, assessing climate change risks, and the potential impacts, and possible mitigations on our various operations, assets and networks, is an ongoing and iterative process.





The South West is also exposed to significant population growth, as well as growth in visitor numbers to the region, especially during the summer months. While this long-term and seasonal growth is beneficial to the regional economy and the communities we serve, it also means that we must carefully manage our assets to ensure there is sufficient capacity to meet these peak demands. This includes drinking water assets and our water resources, as well as our wastewater network and treatment process.

#### **Drainage and wastewater plans**

Our sewerage system was developed over many years, to not just take sewage but also rainwater from roads, gardens and fields. Changing this system cannot happen overnight. But we need to continue the journey we are starting with WaterFit, continuing to drive down pollution and spills by preventing surface water from entering sewers, and operating and maintaining our network and assets effectively.

We cannot do it alone - others have a vital role to play.

We are working with stakeholders to develop our future drainage and wastewater management plans (DWMPs). These will set out how we will work in partnership with others to ensure sustainable, reliable wastewater services in the future.

We are using our current set of tools and data to predict future wastewater network risks given climate change, population growth and urban creep. We are discussing and reviewing with stakeholders so that we can work who is responsible for emerging risks and what action should be taken to address future risks.

Together we can work out the future plans to be delivered by all stakeholders which will ensure that high standards of drainage and wastewater performance are maintained.

We are producing our first plan at the end of June – and welcome feedback and input from all customers, communities and stakeholders.



#### "The ideas are fantastic and I am proud to see my local water supplier looking into the future."

SWW customer, Male, SEG C1C2, Aged 18-29

#### "There definitely needs to be more investment in the South West."

SWW customer, Female, SEG C1, Aged 31-55+



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