

SR27 Draft Business Plan – Investing in Scotland's Future

This is the Main Document of Scottish Water's Draft Business Plan submission for the Strategic Review of Charges 2027-33. It is subject to further development ahead of publication of the Final Business Plan in February 2026.

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SECTION ONE

CHAPTER ONE Our plan in brief

Scottish Water is Scotland's publicly owned, commercially run and independently regulated water company providing essential services to millions of customers each day. We are the most trusted utility in the UK according to the Institute of Customer Service and our positive customer satisfaction score, at more than 94%, is among the best in any sector.

This Draft Business Plan sets out what we propose to deliver for the people of Scotland over the next regulatory period (2027-2033), known as the Strategic Review of Charges or "SR27".

As a publicly owned business, our purpose is to help Scotland flourish. Every penny we receive is reinvested in better services for our customers, communities and the environment. This plan, informed by feedback from over 23,000¹ customers, sets out our challenges, opportunities and proposed priorities for the SR27 period.

Challenges include the impact of the climate crisis (bringing more extreme weather which affects water resources and our assets), a shifting and changing population, new regulatory requirements and the increasing cost of replacing ageing assets.

Our people are key to delivering the services we all rely on, and we ensure success through our investment in them. However Scottish Water can't tackle all these issues on its own. We therefore propose to work in ever closer partnership with household and business customers, communities, our supply chain, local authorities and other stakeholders to find better, more sustainable and lower carbon solutions.

One of the key findings from our customer research is the pride and passion people in Scotland have for our water. There is a strong desire to ensure high standards are maintained at the very least over the long term, while providing value for money for customers. This plan proposes an investment programme of £8.3 billion over the six-year period. We also require £5.1 billion for operating and other costs essential to deliver our services. This means an overall expenditure of £13.4 billion across the SR27 period. This investment is essential to deliver excellent and resilient services for our customers even as we face more extreme weather; safeguard our precious natural environment; enable economic and housing growth across Scotland; maintain our assets for the benefit of current and future generations; and make progress towards our net zero emissions ambition.

We will drive value and efficiency through leveraging innovation, new technologies and nature-based solutions. We also aim to make progress on reducing the demand that is placed on our water and waste water systems – including working with our customers to raise the public profile of the value of water – and to drive benefits from partnership working.

The SR27 Draft Business Plan is the first step towards delivering our Long-Term Strategy and will enable us to continue to provide resilient and sustainable water and waste water services across Scotland. It reflects the priorities of our customers and responds to the requirements of our regulators. It will help us to protect and enhance our natural environment, and to bring the

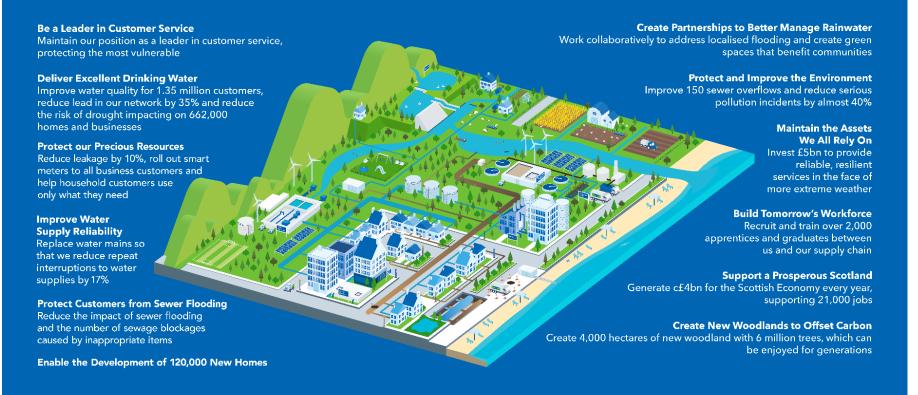
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¹ 23,000 customers' views have been fed into the research synthesis; 169 customers in Scottish Water's SR27 research; and 97 customers in Consumer Scotland's SR27 research.

SR27 Business Plan: Main Document

benefits of this increased investment to ensure resilient services for all communities from Lerwick to Stranraer.

We are proud to be publicly owned. Working with you, we will...



We will deliver great value by working in partnership, driving efficiency and reducing demand.

Every penny we receive is invested into the services we provide for our customers, communities and the environment.

CHAPTER TWO Chief Executive welcome

I am hugely proud to be part of an organisation which provides the excellent water and waste water services that are essential to everyday life in Scotland.

Scottish Water has improved its performance remarkably since we were formed over 20 years ago. From being bottom of the UK league table then, we are now ranked as the top water company in the UK for customer satisfaction and seen as the most trusted utility in the UK. This transformation has been achieved by ensuring customers and communities are at the heart of everything we do. That same focus will continue to guide us in the future.

We work hard to make sure we know what customers expect from us and the insights we have gained have been used to frame this Draft Business Plan. We have listened to over 23,000 customers, using a variety of methods, to understand their expectations and changes to priorities. This commitment to listening and responding to our customers is fundamental to our success as a publicly owned organisation and provides a strong evidence-base for our Draft Business Plan.

The constructive relationships we have with our regulators and the Scottish Government are a central element of why the water sector in Scotland is performing well. As a monopoly provider of an essential service, we are, rightly, subject to strong, independent regulation.

For many years now, the regulatory approach has been driven through a shared commitment from Scottish Water and our regulators to ethical business practice and regulation. This is a tremendous asset for Scotland; it means that the challenges and opportunities facing us are recognised, considered and worked on collectively.

As part of this approach, together, we developed a <u>Water Sector Vision</u> in 2018, which all sector stakeholders support. The Vision sets bold ambitions to:

- deliver the best water, waste water and drainage services possible;
- help make Scotland more resilient to the challenges we face, and;
- enable broader economic, social and environmental benefits to be realised through the investments we deliver and the choices we make.

We recently published our 25-year <u>Long-Term Strategy</u>, which sets out how we will play our part, and how we need to work with others, to deliver the Water Sector Vision.

This Draft Business Plan is the first step towards achieving our Long-Term Strategy and the Water Sector Vision, informed by what we have heard from our customers across the length and breadth of Scotland. It will enable us to meet the objectives of the Scotlish Government and our regulatory requirements, and it also seeks to balance investment and cost to provide great value for customers, improve service for the current generation, and safeguard the interests of future generations.

Our Draft Business Plan responds to the challenges we face. We have set ourselves challenging ambitions to be bolder, more innovative and more collaborative; ensuring we are delivering the best value for money for every pound we invest.

It also recognises the importance of continuing with a prudent, balanced funding and investment trajectory to avoid cliff-edge increases in the future. This plan will enable us to deliver resilient services for our customers; support economic and housing growth across Scotland; make

progress towards our net zero emissions ambition; and maintain our assets now and into the future, despite the additional pressures on them from more frequent extreme weather events.

I am confident this plan sets us on the right course to drive performance, innovate and lead collaborative partnerships to levels not seen before. It will also unlock significant levels of investment to allow us to ensure services are resilient and strengthen our customer and community focus.

How we deliver this plan is also going to be different to traditional approaches. Whilst we still need to deliver excellent engineering solutions, we will also seize opportunities to deliver the outcomes we need through nature-based solutions. These can deliver great value over the long term, including through creation of environmental and social amenity benefits.

We will expand our initiatives to educate customers as to how they can "play an owner's part" and help to reduce demand on our services, which in turn will help to reduce costs.

We have an amazing team of dedicated and skilled people working across Scottish Water and our supply chain partners. For the period ahead, we need to work more closely than ever before with customers, communities and organisations across Scotland to find new ways to protect essential services and deliver wider benefits to society. This will require ever greater collaboration, innovation and determination. I am confident it can be done as we start from a strong base.

This Draft Business Plan looks ahead to 2033. We are committed to keeping customers at the heart of all we do over this period and to progressing the draft objectives set out by the Scottish Ministers.

This plan is a key stepping stone on the path to delivering our Long-Term Strategy and the Water Sector Vision. It will allow us to protect and enhance Scotland's water, the most precious resource of all. By doing so, we can help Scotland flourish.

CHAPTER THREE Board assurance report

The Scottish Water Board (the Board) has charged the Chief Executive and management team of Scottish Water with the responsibility to establish and maintain the sound systems of internal control and external assurance that support the creation of the SR27 Draft Business Plan.

The systems of internal control that support and assure the completion of the SR27 Draft Business Plan to an appropriate level of completeness (acknowledging that the plan must continue to be refined and updated ahead of submission of the Final Business Plan) are:

- the creation of accurate materials by data and subject owners (1st line of assurance);
- the assessment and 'sign-off' by workstream leads and senior leaders (2nd line of assurance);
- external assurance and advice (3rd line of assurance), including:
 - advice on the design of the assurance process to ensure that it was fit for purpose, provided by Alium Blue;
 - assurance of the overall Business Plan submission, provided by Binnies;
 - external analysis of capex cost data by ChandlerKBS, Arcadis and M²;
 - peer review of the efficiency submission by First Economics;
 - external assessment of Project Investment Appraisal by Stantec;
 - external assessment of Management Approaches by AtkinsRealis;
 - external assurance of the financial model by EY;
 - external assurance and advice on individual investment projects, programmes or scoping exercises, as appropriate;
 - external assurance of the quality of customer research from the Independent Customer Group (ICG); and
 - the support of external experts (ie Stantec and PA Consulting) in the creation and completion of Business Plan materials.

These systems of control are designed to reduce the frequency of issues and inaccuracies, significantly reduce the risk of material error, and to provide assurance on the accuracy and appropriate completeness of the material provided in the Draft Business Plan.

Process

The Board gains assurance as to the effectiveness of these systems of control through:

- the controls, expert advice and assurance processes put in place by the Executive Directors to ensure that the Draft Business Plan is accurate and shows sufficient progress towards completion of the Final Business Plan to be submitted in February 2026;
- reporting from Executive Directors on associated matters;

• the results of both internal and external audit, and other internal and external review agencies, as appropriate for the draft stage of the Business Plan process;

the adequacy of management response to issues identified by audit and review activity;

evidence from the early tranches of customer research; and

• the Board's assessment of the Draft Business Plan with reference to the Board's risk

appetite.

Outcome

Having received feedback from the Audit and Risk Committee and Binnies, the external assuror, the Board reports that appropriate processes have been followed in the creation of the SR27 Draft Business Plan, and that these processes have taken into account feedback from internal and external assurance processes (either through updates to the Draft Business Plan or updated plans for issues to be addressed in the Final Business Plan). The Board is satisfied that Scottish Water's plan is developing in line with the WICS Final Methodology for SR27, acknowledging that there will be further development of evidence and analysis required between submission of the

Draft and Final Business Plans.

The Board is satisfied that Scottish Water's plan is developing in line with the Memorandum of Understanding for Customer Engagement in SR27 between Scottish Water, WICS and Consumer Scotland. The Board has seen the first tranche of customer research and is content that these findings are appropriately reflected in the Draft Business Plan, subject to further development and refinement. The Board remains confident that processes are in place to incorporate the

findings of further tranches of customer research into the Final Business Plan.

The Board considers the information contained within the SR27 Draft Business Plan to be an accurate representation of evidence and forecasts as Scottish Water understands them at this point in the Business Plan process.

The forecasts and supporting evidence in this plan will continue to be developed with stakeholders until submission of the Final Business Plan in February 2026.

For the Final Business Plan, the Board will provide a more comprehensive Assurance Statement based on Scottish Water's completed analysis and final estimates.

SIGNED:

ALEX PLANT

CHIEF EXECUTIVE OFFICER

(on behalf of the Board of Scottish Water)

Date: 3/6/2025

CHAPTER FOUR Our purpose and long-term aspirations

We care for, treat and pipe the nation's drinking water and safely remove and treat waste water, providing a service that is essential to everyday life for households and businesses, communities and the environment. Our purpose is to support a flourishing Scotland by being trusted to care for the water on which Scotland depends.

Scottish Water is publicly owned, commercially run and independently regulated.

Publicly owned

Scottish Water is owned by the Scottish Government on behalf of the people of Scotland. We don't have shareholders, so every penny we receive and any profit we make is invested in better services for our customers and communities. We also seek to make a positive impact beyond our day-to-day duties: we're here for schoolchildren learning about the water environment, young people seeking apprenticeships and career opportunities, and visitors who use our Top Up Taps and love our great tasting water. Additionally, our commitment to sustainable practices helps protect and preserve Scotland's natural resources, ensuring a healthier environment for future generations.

Commercially run

We are a public corporation with an independent Board overseeing all that we do. We are funded through revenue raised by customer charges and borrowing from the Scottish Government. Our Board is focussed on ensuring that we run an efficient business that is delivering value for our customers and meeting the objectives of ministers.

Independently regulated

Independent scrutiny and regulation are essential for customer trust and confidence. Our work is scrutinised by the Scottish Parliament, and there are a number of independent regulators and bodies within the water sector in Scotland, each with an important and unique role: the Scottish Government; the Drinking Water Quality Regulator (DWQR); Scottish Environment Protection Agency (SEPA); the Water Industry Commission for Scotland (WICS); Consumer Scotland; and the Independent Customer Group (ICG).

The work of our regulators and sector stakeholders is crucial to the success of Scotland's water sector, and we value their part in supporting us to deliver our services. Ethical Business Practice and Regulation has been central to the way we work. This approach draws upon research showing that better outcomes can be achieved by regulation and business practices which actively promote a culture of openness and collaboration, based upon shared values.

Our long-term aspirations

The water industry has long life assets and risks which mean we must plan over different time horizons, to ensure resilience, sustainability, and value for customers. Whilst this Draft Business Plan deals with the near-term from 2027 to 2033, we must consider this plan in the context of the longer term to ensure we make decisions today which build towards a sustainable future.

Water Sector Vision

The <u>Vision</u> reflects the sector's aspirations for delivering vital services to customers while leading the way in responding to the climate emergency. This vision was formally launched by the Cabinet

Secretary for the Environment, Climate Change and Land Reform at the International Water Association Leading Edge Technology conference in 2019.

Long-Term Strategy

In May 2025 we published our Long-Term Strategy, *Our Sustainable Future Together*, outlining how we will play our part in making the Water Sector Vision a reality.

It builds on our three strategic ambitions, as set out in our SR21 Strategic Plan – Service Excellence; Beyond Net Zero Emissions; Great Value and Financial Sustainability – and goes even further to ensure Scotland's water and waste water services stay sustainable, resilient, and affordable for generations to come. We've also made a promise to continue our work to improve the lives of our customers and communities, and help Scotland to flourish come rain or shine.

We are prioritising three long-term outcomes over the next 25 years:

- Scotland's tap water remains a source of national pride and is valued as a precious resource.
- The quality of our rivers and seas has improved, and our communities are protected from sewer flooding, through collaboration with others.
- Scottish Water has played a key role in enabling Scotland's sustainable economic and housing growth.

These are vital areas where more work is required, and we will measure and report our progress against them. The SR27 Draft Business Plan is a vital first step on the journey to delivering our Long-Term Strategy and playing our role in enabling the Water Sector Vision.

Responding to a changing climate

The Scottish Government declared a climate emergency in 2019, and its Programme for Government announced an ambitious plan to become carbon neutral by 2045.

We have responded to this target by committing to net zero emissions by 2040, five years earlier than the national target. In September 2020 we published our <u>Net Zero Emissions Routemap</u>, outlining the path to achieving emissions-free water and waste water services by 2040.

This Draft Business Plan is the penultimate business plan ahead of our 2040 target, and it plays a crucial role in ensuring we fulfil our commitments.

As the climate changes, we have a responsibility to adapt, minimising the impacts to service. Scottish Water has a statutory requirement to adapt to climate change as a named public body in the Climate Change (Scotland) Act 2009. There is also a requirement to report on climate change adaptation to the UK Government Task Force on Climate-related Financial Disclosure.

CHAPTER FIVE Our customers

Customers and communities are at the heart of everything Scottish Water does. We promise to improve their lives and help Scotland to flourish come rain or shine.

We serve over 5 million customers, providing water and waste water services to 2.64 million households and over 160,000 business premises. We also supply wholesale services to 20 Licensed Providers who provide retail services to business customers.

Our customers live and work in communities the length and breadth of Scotland, and we must provide a high level of service for all, at the same cost wherever they live. Having 32% of the United Kingdom's land area and 8% of the population, Scotland has some of the most sparsely populated areas in the UK. We are committed to overcoming the challenges this creates and ensuring all customers receive the same high standards wherever they live.

Nearly a quarter of Scotland's population lives and works in the Greater Glasgow area, and almost two thirds live in the 'Central Belt'. Other areas are predominantly rural, dominated by agriculture and forest, and offer some of the most beautiful landscapes in the world. Out of Scotland's 900 islands, 118 are inhabited and Scottish Water provides water or waste water services to 65 of these. This gives us unique challenges regarding how we deliver consistent, affordable and sustainable services across the country.

Customers at the heart of our plan

Customers are at the heart of our business and their expectations and priorities are a key factor in our decision-making process. Building these views into our plans is part of our on-going approach that allows us to ensure our customers' needs are at the centre of our service delivery. Looking to the future, we recognise that customers are pivotal to helping us solve some of the most complex challenges we face and so must be involved in our strategies and plans from the outset

Scottish Water has a strong track record of understanding customers' views through customer research. We have listened to the views of more than 23,000 customers as part of our continual and ongoing research programme. Scottish Water's SR27 research programme has to date engaged with more than 100 household customers and 25 businesses on business-planning issues, and builds on our Long-Term Strategy research programme which involved more than 5,000 customers. This is underpinned by Scottish Water's synthesis framework and database, which consolidates approximately 2,000 insights from over 50 research sources, reflecting the views of around 23,000 customers gathered over the past nine years.

The strategic issues identified in the Long-Term Strategy require customers to engage with complex systems thinking, moving beyond immediate service concerns to consider long-term risk and resilience. To address this research challenge for SR27, Scottish Water is increasingly adopting extended research approaches that involve customer engagement over a sustained period of time. These approaches give customers the time, space and information that they need to develop informed views on relevant topics and give deeper insights than can be gained by one-off research activities.

The role of customers in Scottish Water's SR15 and SR21 review processes was strengthened by the role of the Customer Forum, a body appointed to secure the best outcome for customers in the SR15 Business Plan and agree the SR21 Strategic Plan with Scottish Water on behalf of customers, before the Commission made its Final Determination. We are building on this model

for SR27, with the introduction of a Memorandum of Understanding between WICS, Consumer Scotland and Scottish Water. The Memorandum of Understanding retains the Independent Customer Group to support and challenge Scottish Water's understanding and incorporation of customers' needs and expectations in its Business Plan. It also defines Consumer Scotland's role in leading a longitudinal deliberative research study² which will ask customers whether the Final Business Plan commands their support. This research will be key to determining whether the Water Industry Commission for Scotland's Final Determination commands consumers' support.

Our customers' priorities

SR27 is the first step on the journey towards the outcomes set out in Scottish Water's Long-Term Strategy. Our Long-Term Strategy research found that customers want to see standards across each service area maintained at the very least over the long-term, and that they would not trade off deterioration in any service area to achieve greater improvements in another. Long-term objectives around ensuring a clean water supply and the local natural environment were seen as the most important, along with making sure the services provided are affordable for customers.

Customers who engaged in Scottish Water's SR27 research programme held positive overall sentiments towards Scottish Water and the quality of the drinking water that we provide. The national pride associated with water quality in Scotland plays a significant role in shaping customer expectations, especially in terms of quality, sustainability, and protection of the resource.

The extended research methodology resulted in customers developing a good understanding of the challenges presented by Scottish Water. When presenting various scenarios for investment to customers it was clear that what really mattered was value for money. Customers had a strong desire to avoid a decline in service levels and found investment in repairing and replacing assets to future proof the network to be essential, as long as the cost wasn't too high.

This was fed into the development of the revised investment reference scenario which is featured in this Draft Business Plan, directly impacting the rebalancing of the scenario. Customers generally felt that this new investment scenario was well-balanced and offered clear, tangible outcomes. Most customers agreed that Scottish Water had listened to their feedback from the original research when designing the rebalanced investment scenario.

When discussing investment areas, customers told us:

Balancing supply and demand of drinking water

There is overall acceptance that climate and population challenges are affecting, or will
affect, the availability of drinking water in some areas, although there can be scepticism
from customers around the likelihood of drought in Scotland, and the expected frequency
of these issues in the future.

Leakage

• Scottish Water's reduction in leakage over the last ten years is welcome. Leakage is seen as a waste of money and can be felt by customers to be representative of past

² A longitudinal deliberative research study is a type of research that involves engaging a group of participants over an extended period to gather in-depth insights.

inefficiencies and a lack of investment. Customers are also concerned about the environmental impact of leakage and impacts on the availability of drinking water.

Managing rainwater

 Partnership working is seen as key, as customers do not see this as something that Scottish Water can address on its own. Associations are made by customers with overdevelopment and questionable planning decisions, and they feel that Scottish Water and its customers should not be solely responsible for funding solutions. Non-household customers can be more cognisant of this issue than household customers, understanding the potential impact on their own operations and reputations.

Repairing and replacing assets

• The ongoing programme of general repair and replacement of assets is broadly seen as a high priority, and customers recognise the extent of the challenge. However, some customers associate this need with a lack of previous investment, causing resentment that they are now being faced with paying the price for this.

Internal sewer flooding

Internal sewer flooding is seen as unacceptable by customers. However, it is perceived to
affect a relatively small number of customers in comparison to some of the other
potential investment areas. Customers can be conflicted between wanting to remove this
risk for those who are affected and directing spending towards areas with a wider impact
on a higher number of customers.

Carbon

Customers accept the wider need to lower carbon emissions. The suggested activities
outlined by Scottish Water were welcomed. However, customers tended to feel uncertain
about the need for investment in this area as a priority, due to other pressing needs,
uncertainty about the likelihood of achieving targets, and the perceived role of other
agencies. There was more support from some future customers and those with a more
environmental outlook, who see the wider aim of addressing climate change as a priority
and are wary about society in general not moving forward quickly enough in this area.

Throughout our SR27 research programme we have been transparent with customers about the impact of each investment scenario on their bills. We have shown these impacts to customers on as personalised a basis as possible, reflecting their own Council Tax Band or business rates and the level of discount that they receive. We also tested smooth vs. front loaded profiles with customers. While the rationale for front loading charges was broadly understood, and even accepted by many, customers were concerned that Scottish Water would not be able to communicate this rationale to a wider customer base who have not had the benefit of direct discussions on this topic. They were also concerned that some customers might face affordability issues. Smooth increases were seen as a more acceptable way to introduce bill rises.

Scottish Water, together with Consumer Scotland and ICG, collectively recognise that these views might not be representative of our wider customer base, for whom water industry issues might not be top of mind. To make sure that we understand how customers perceive our plans for SR27, Scottish Water will commission a nationally representative study to take place between

Draft and Final Business Plan submissions, with findings influencing the Final Business Plan. This will complement Consumer Scotland's longitudinal deliberative research study.

CHAPTER SIX A changing Scotland

Scottish Water must consider long-term risks when planning investment to make sure we are investing wisely, ensuring the continued sustainability, affordability and resilience of water and waste water services for current and future customers.

There are a number of challenges we have considered in producing this Draft Business Plan, these challenges shape the decisions we take now and into the future.

What our customers have told us about our long-term challenges

Many customers have not considered the impact of climate change, population change and ageing assets on Scottish Water's provision of water and waste water services. They are however pleased to learn that Scottish Water is thinking in the long-term and is being proactive.

Views on Scottish Water's ability to deal with these challenges are mixed. Some customers believe that Scottish Water's ownership model enables money to be invested into services, rather than profits being taken. Others however feel that Scottish Water's ability to deal with the challenges is dependent on how quickly the challenges materialise, and the ability to prioritise investment quickly enough.

More extreme weather

As a water business, we rely on the natural environment for the resources we need to provide our services. Many of our water and waste water assets were not designed to cope with the frequency and severity of weather events we are seeing now.

In our Climate Change Adaption Plan published in February 2024, we outlined key climate change risks that we need to address:

- Warmer, drier summers that can lead to drought and deteriorating raw water quality
- More intense rainfall that leads to flooding
- Variable rainfall patterns that impact our ability to maintain environmental compliance
- More frequent storms that disrupt our assets and services
- Sea level rise and coastal erosion that floods or damages our assets

We need to address these issues and build climate change adaptation into our near-term plans if we are to continue to deliver a reliable, resilient and sustainable service for our customers and for society.

Population growth and change

On Census Day, 20 March 2022, the population of Scotland was estimated to be 5,436,600, the largest population ever recorded by Scotland's Census. It's not just the population that's increasing: the number of households in Scotland is projected to increase to 2.7 million by 2043, a 10% increase on the 2018 total. This equates to an average of more than 20,000 additional

households per year, many of which will be one or two person households. Regionally, growth is expected to be fastest in areas to the east of the country, with Midlothian projected to have the biggest (16%) percentage increase. The number of people aged over 65 is projected to increase by 824,000 (20%) by 2028.

This predicted increase in population, along with the changes to where people live, will mean that we need to provide more water, and in different places if we keep using it at the same rate we do today. The increase in housing will put more pressure on our waste water network in particular, and result in a need for new assets to treat the additional volume of waste water. In addition, there will be an increase in non-permeable surfaces, such as driveways, paths and roads that will further reduce green space for natural drainage.

On 15 May 2024, the Scottish Government declared a national housing emergency highlighting the critical need to address housing shortages. Several local authorities have declared housing emergencies in their respective areas including Argyll and Bute, Edinburgh, Fife, Glasgow, Scottish Borders, South Lanarkshire, West Dunbartonshire, Aberdeen City and East Renfrewshire. As a publicly owned organisation, we recognise the role we play in helping to address the current housing crisis by enabling new homes to be connected to the water and waste water networks.

The need to replace ageing assets

What our customers have told us about ageing assets

Customers are generally surprised to hear about the scale of Scottish Water's infrastructure, and to learn its age. Customers understand and acknowledge that ageing assets are a challenge for Scottish Water. They recognise the need for investment in updating and replacing these older assets

We currently manage an asset base that would cost nearly £120 billion to fully replace, ranging from large treatment works to pipes in the ground and sensors in our network, all of which are critical to delivering a resilient and reliable water and waste water service for our customers across Scotland.

Previous local authorities or water boards installed a large number of assets in the 1950s and 1990s to respond to new legislation to create new public water and waste water systems. When Scottish Water was formed in 2002 we inherited some assets that were already over 100 years old. Since the formation of Scottish Water additional legislation has increased the complexity of the assets that have been installed. These tend to have shorter lives than older assets and need to be repaired and replaced more frequently. In addition, the increasing integration of digital technology with our assets introduces further challenges, as these systems often become obsolete more quickly or require regular security enhancements to remain effective and compliant.

Tightening Regulatory Requirements

The regulatory landscape is constantly changing. We are working with the Scottish Government to review water industry policy and assess how water, sewerage, and drainage services can adapt to climate change impacts to prevent water scarcity and mitigate flooding.

The European Union has recently introduced two new directives: the recast Drinking Water Directive (rDWD), to which Scotland has aligned with most provisions, and the recast Urban Wastewater Treatment Directive (rUWWTD). The rDWD tightens quality standards for catchment risk management and drinking water, while the rUWWTD sets higher standards for waste water collection, treatment and resource recovery. Our investment planning has included Public Water Supplies (Scotland) Regulations which were amended in line with the rDWD quality standards and came into force 1 January 2023. However, both Directives have implementation dates for key requirements within the 2027-2033 period that have not been included in our business planning activities as discussion on their requirements and how these will be applied are ongoing.

We are working with the Scottish Government to provide the necessary evidence to support their decision regarding these changes.

CHAPTER SEVEN Our plans to work differently

This plan will enable us to continue to deliver sustainable and affordable water services despite the challenges we face. But we can't do this alone – we will need to build partnerships across Scotland, find new ways of working and think differently to make sure we continue to meet customer expectations both now and into the long-term.

We will create new partnerships, addressing challenges and delivering wider benefits

Collaboration and partnership working are key, and we will work with the Scottish Government, our regulators, local authorities, farmers, developers, campaign groups, businesses, politicians, and customers and communities to find lasting solutions at the lowest cost and lowest carbon to better deliver services. These partnerships will address the challenges we face and deliver other benefits. For example, by building sustainable urban drainage solutions we address surface water flooding and provide green spaces in towns and cities for everyone to enjoy.

We will work with our service partners to continue to deliver value for money

As a publicly owned organisation, every pound we collect in customer charges is invested to deliver the services people need, while keeping bills as low as possible.

The complexity of what we do, and the size of our investment programme means that we have the opportunity to drive savings by doing things differently. Our new way of working with our supply chain (see Chapter 10, page 64 & 65) will allow us to ensure we invest wisely to deliver as much benefit to the customers, communities and environment of Scotland as possible. By investing in our supply chain, we not only enhance our efficiency and outcomes, but also stimulate economic growth, create jobs, and support local businesses across Scotland.

We will use digital solutions to work ever smarter

We already use digitisation, artificial intelligence and automation to improve the way we work, save money, reduce carbon and improve service outcomes. This plan sets out how we will go further, maximising the potential for digital insights to improve our ability to be proactive, rather than reactive, when issues emerge. This will mean that we can maximise the use of our existing assets to improve service, responding before customers and the environment feel an impact, at a reduced cost. You can read more in our **Digital Strategy Appendix**.

We will help you protect the services we all rely on

Customers and communities will play an essential role in making services sustainable. We will build partnerships with our customers to reduce water demand, keep rainwater out of our systems, and stop blockages in sewer pipes by only flushing the 3Ps (pee, poo and paper). We will inspire the next generation of responsible water citizens through our Generation H_2O education programme and aim to engage 90% of schools in Scotland by 2033.

We will use more nature-based solutions and create more green spaces

We will seek a significant increase in biodiversity through the use of nature-based solutions in our investment projects; minimising pollution to the environment, reducing flood risk for customers, creating social amenity and supporting nature recovery.

Extreme weather will result in higher intensity rainfall, and we will manage rainwater on the surface through an increased focus on working with nature, including blue-green solutions which

mimic natural drainage, helping to slow down the flow of water or prevent it from entering the sewer network. Working with partners such as local authorities, developers and customers, we will also seek to create additional benefits like new woodlands, urban green spaces and increased biodiversity which we can all enjoy.

We will embrace Circular Economy principles

We will find new ways to make the most of everything we use and produce, this will range from capturing heat from our sewers to provide energy for hospitals and other public buildings, capturing hydro power and supporting the development of green hydrogen as an alternative fuel.

We will look after Scotland's precious water resources

We know it is essential that water is available whenever you need it, and managing demand for water is going to be critical as we experience more periods of prolonged drought and see an increase in population, particularly in the east of Scotland where there is less drought-resilience.

Reducing the amount of water lost from both our pipes and our customers' pipes is critical. Since 2002, we have reduced leakage levels by over 50% and we are setting an ambitious target for SR27. We will target a 10% reduction in leakage in the SR27 period.

On average, a person in Scotland uses nearly 20% more water than other parts of the UK, and 30% more than in parts of Europe. Everyone in Scotland can be a responsible water citizen and make a difference by only using what they need. Over SR27 we will help household and business customers conserve water through support, campaigns and our Generation H_2O education programme, to help us ensure we can efficiently provide resilient supplies of water.

In SR27, we will continue to roll out smart metering to all business customers, enabling them to monitor and reduce their water usage and identify leaks. Additionally, in early 2025 we installed smart monitors for close to 1,500 household customers in Dundee as part of a three-year pilot. This pilot aims to understand if increased awareness of water consumption will lead to sustained reductions in water use within a household, help us identify customer-side leakage which is currently very difficult to find, and provide help in finding leaks in our network.

During SR27 we will ensure that we maintain the quality of our laboratory and sampling infrastructure. Our laboratories are a critical core function for Scottish Water performing regulatory sampling/tests as well as operational sampling and incident response. We have made provision in this plan for the replacement of our largest laboratory facility, which delivers over 85% of all our water and wastewater analysis.

We will continue to manage our assets responsibly

What our customers have told us about maintaining assets

Asset maintenance is a concept that customers intuitively understand. It is felt to be highly important, and core to Scottish Water's purpose as an organisation. Making things last is seen as an important area for Scottish Water's focus, appealing to all customers and older customers in particular. They are keen to reduce the risk of service failures, as well as avoid unnecessary costs.

It is seen as part of Scottish Water's role and responsibility and should be an ongoing area of investment with a focus on preventing future problems.

We have a diverse range of assets, from water pipes, sewers and treatment works to office buildings, vehicles and IT infrastructure. All these assets contribute to the day-to-day operation of business. As a responsible business, we must ensure that future generations inherit assets that have been well looked after and are 'future proof'.

The management of our existing asset base is covered by our asset repair, refurbishment and replacement (AR3) policy.

Our Asset Management policy aims to ensure reliable service delivery, operational resilience, cost effective lifecycle management, sustainability and innovation. This policy outlines principles governing the management of Scottish Water owned assets, from source to tap, sink to sea and all supporting assets, excluding those managed through joint ventures or external contracts. The policy outlines several key points:

- Commitment to net zero, climate change mitigation, and adaptation in decision-making.
- Managing assets to keep services affordable through prioritising investment and seeking improvement and innovation.
- Policy-led decision-making to standardise approaches to assets and systems.
- Ensuring high-quality data and analytics for decision-making.
- Alignment with external standards, regulatory compliance, and legal and customer requirements.
- Support for the Health & Safety Strategy to inspire people to go beyond zero harm.
- Continuous improvement of the Asset Management system.

This policy is supported by our Management Approach documents that detail by asset type the inspection and intervention regime to be carried out to ensure they provide the service to customers.

SECTION TWO

CHAPTER EIGHT Our plan for 2027-33

What we will deliver in SR27

This Draft Business Plan is the first step on our journey to achieve our Long-Term Strategy. At each Strategic Review of Charges, we will set out how we propose to make progress towards the long-term outcomes and objectives.

The decisions we are making in this business plan are all set in the context of our long-term aspirations to:

- 1. Deliver our Promise to Customers that we will continue our work to improve the lives of our customers and communities, and help Scotland to flourish come rain or shine.
- 2. Deliver our long-term outcome to play a key role in enabling Scotland's sustainable economic and housing growth.
- 3. Deliver our long-term outcome to ensure Scotland's tap water remains a source of national pride and is valued as a precious resource.
- 4. Deliver our long-term outcome to play our role to ensure the quality of our rivers and seas is improved, and our communities are protected from sewer flooding, through collaboration with others.
- 5. Respond to a changing climate.

We detail our investment plans to address these aims below.

We will continue our work to improve the lives of our customers and communities, and help Scotland to flourish come rain or shine

Customers and communities are at the heart of everything we do at Scottish Water, and we will always strive to deliver the excellent service our customers expect.

We will maintain our position as a leader in customer service and further improve service for customers in vulnerable circumstances.

It is of critical importance to the success of our SR27 Draft Business Plan and our Long-Term Strategy that our customers trust us and see themselves as partners with a personal share in all we do. We will continue to foster a relationship of openness and honesty with our customers and communities, so they understand who we are, what we do and how we do it.

Throughout SR27 and in the delivery of the following six priority areas, we will focus on working efficiently, working safely, and improving our overall performance for customers. By collaborating with others, we will ensure we get the most value for them for every pound we spend.

In SR27 we will:

- Continue to listen to all of our customers and evidence where their views have informed our strategic and day-to-day decision making – ensuring customers continue to be at the heart of all we do.
- Use technology and data to ensure the most effective and efficient use of funding by streamlining, simplifying, personalising and improving contact channels and service for customers, whilst maintaining our commitment to human contact too.

- Continue to invest in our ability to predict and prevent issues to protect our customers from disruption whilst optimising our ability to resolve interruptions to service first time.
- Commit to further development and commitment of our service for customers with vulnerabilities.
- Continue to develop our workforce to become accredited customer service professionals through the Institute of Customer Service's training and development programmes. Ensuring Service Excellence is a priority for everyone, regardless of their role.
- Grow our presence in customers' and communities' lives through community engagement, building positive relationships to improve services and contribute to a flourishing Scotland.

We are forecasting increases in all our Customer Experience Measures and maintaining upper quartile performance in the Retailer Measure of Experience

During SR21 we have made great progress in improving how we support and work with our customers with several notable achievements including:

- Achieving our highest satisfaction levels amongst household customers, with 94.15% of household customers being satisfied with the service they receive when they contact us.
- Ranking 1st for 'overall service' for our Retailer Measure of Experience, which benchmarks
 the service we provide to Licensed Providers against other wholesale providers in England
 and Wales.
- Tracking above target for Development Customer Experience Measure, which monitors developer satisfaction who engage us about new connections.

We plan to maintain upper quartile position of the UK utility companies on the UK Customer Satisfaction Index and continue to invest in our ongoing customer research programme

As well as listening to customers directly, Scottish Water is an active member of the Institute of Customer Service, who publish the UK Customer Satisfaction Index³ (UKCSI) every six months. This allows us to benchmark customer satisfaction against other water companies, utilities, and a variety of other sectors. In the most recent January 2025 wave, Scottish Water's results were notably higher than the water sector, utilities, and Scottish averages. Scottish Water has maintained the top spot for UK water companies for four consecutive waves since July 2023.

Our robust customer research programme will continue to inform our improvement activities and decision making whilst helping us to build and strengthen relationships with customers and communities and demonstrate just how much we care. Our research programme ranges from feedback on service issues, seeking opinion on specific investment projects or topics, to gaining opinion on long-term business strategy. Research is always conducted with a representative range of customers from across our customer base.

We will continue to evolve our service for customers with vulnerabilities

We appreciate that many of our customers face personal challenges which makes them more vulnerable to service impacts, and we have focused on how we can support them through our <u>Priority Services Register</u>. As well as raising awareness through promotion, we have established meaningful partnerships with Age Scotland and other utility companies, enabling us to better support those customers who need us most when services are interrupted. In SR27 we will invest

³ <u>UK Customer Satisfaction Index (UKCSI)</u> * <u>Institute of Customer Service</u>

to ensure we reach more customers who need extra help by working with other agencies including the NHS, community groups and our partnerships. The range of services and support on offer will expand as we increase our register of customers, including increased accessibility, prioritised care and tailored communications.

We will work in partnership with our customers to grow the next generation of responsible water citizens

Customers and communities will play an increasingly important role in making services sustainable and resilient. We will form partnerships with them to develop a shared understanding of the challenges we face. This collaboration will help us gain support for behaviours that reduce the demand on our services and keep bills as low as possible.

We have launched our Generation H₂O programme, which aims to educate and engage schoolchildren and future customers about the importance of water as a precious resource. This programme offers age-appropriate, tailored, and engaging materials.

Launched in September 2023, in its first 15 months the programme has reached over 786 teachers and 42,670 young people. This is just the beginning. In SR27 we will broaden the scope of Generation H_2O through expanding our programme of school visits, and via our Capital Investment programme, promoting STEM (science, technology, engineering, and mathematics) skill challenges in communities to address skills gaps and establish lifelong partnerships founded on customer appreciation. This will complement the desire for Scottish Water to nurture our customers as partners who understand their role in the success of our business, whether through taking an active role in using less water or ensuring only the correct items are flushed.

We will use digital solutions to work smarter – making the most efficient use of customers' money

Digital technology can improve customer experience, improve value for money and reduce disruption to services. They can also allow our advisers to spend more time on complex customer issues, or with customers who need personalised assistance.

Digital initiatives which will directly support out customer and community experience include:

- Continued development of our Community Metrics and Analysis Platform that makes customer insight accessible with dynamic, real-time data to inform tactical and strategic planning helping us make the right decisions for our customers.
- Enhancing our customer contact channels with digitally supported and tailored portals for each of our main customer groups: households, businesses and developers.
- Smart metering solutions for business customers is an enabler for Scottish Water to provide a more proactive service, identifying and resolving issues, such as water leaks, before customers or Licensed Providers become aware of them.
- Continuing to develop the fully integrated remote diagnose offering that we have rolled out in the SR21 period. This is where customers are able to submit photos or videos which allow us to identify problems and solutions remotely eg a burst water main. This allows us to resolve more issues first time, reducing impacts on customers.

Case study - Understanding how we serve communities

During SR21 we developed our Community Powered Insights Dashboard (CuPID), which brings together data from across the business into one place. It gathers information on the volume of cases and water events that have occurred over the previous four days (including the current day). This allows our teams to track a near real-time understanding (updated every 15 minutes) of what our customers are contacting us about in relation to their water supply. The dashboard displays data for the whole of Scotland and can be filtered to show information for a particular area (using water operational areas, postcodes etc) or timeframe. The insights provided by this dashboard help our operational teams to provide a more focused response to customers impacted by a particular event and drives value by making the best possible decisions. This functionality was extended in 2025 to provide a view of what our customers are contacting us about in relation to their waste water services.

While CuPID provides a current view of our service provision, we have also developed the Community Metrics and Analysis Platform to help our teams understand how well an area or community has been served. The dashboard brings together mainly quantitative data such as the volume of cases, events, escalations, complaints, plus some qualitative data¹, providing a temperature check of the level of service, over time. This helps us to better understand the experiences of our customers and communities, to shape and inform investment decisions, build operational responses, and improve communication and engagement with customers and communities.

Both dashboards have proved successful, evolving from their initial 'proof of concept' designs to their current state. We have plans to continue to extend their functionality and explore other opportunities during the remainder of SR21 and into SR27, including providing more granular exploration of the data to further improve the service we offer to customers.

We will invest to drive targeted service improvements, with additional investment also being made in broader digital solutions to benefit our customers and communities

Customer and Communities Programmes and Investments:

Programme	Description	Investment
Customer Research	We will continue to listen to our customers through our established and robust research programmes both to improve day to day service and inform investment and future strategy decisions. Our research programme ranges from feedback on service issues, seeking opinion on specific investment projects or topics, to gaining opinion on long-term business strategy. Research is always conducted with a representative range of customers from across our customer base.	£1.2 million
Priority Service Register Improvements	Our work will evolve as we ensure we reach all our customers who need some extra help via agencies, the NHS, community groups and our partnerships. The range of services and support on offer will also expand. As the Register grows, we will categorise customers' needs, prioritise assistance and ensure the most vulnerable are looked after first.	£2.5 million

You can find our more information in our **Customer & Community Experience Strategy**.

Supporting a flourishing Scotland

Our commitment to supporting a flourishing Scotland goes beyond delivering essential services. As a public corporation, we have a responsibility to consider the economic, societal, and environmental benefits we can contribute while providing our services. We strive to add value wherever possible. We support a flourishing Scotland by:

Contributing to a growing economy

- For every position at Scottish Water, four more jobs are generated in the wider Scottish economy, especially in high-value STEM fields.
- Our investment programme supports over 10,000 jobs in Scotland, including 2,000 apprenticeship and graduate placements between us and our supply chain.
- We spend around £1.3 billion a year buying goods and services. We have 430 suppliers
 who are vital in supporting us to deliver our capital and operational activities. Around 70%
 of our supply chain are classified as small or medium-sized enterprises, and around 90%
 have bases here in Scotland. 4
- Our procurement procedures were described as world-class by the Chartered Institute of Procurement and Supply, and we have maintained platinum accreditation status since 2015.

⁴ Scottish Water Procurement and Supply Chain Annual Report 2023/24

• We play a vital role in supporting the development of new homes and business premises (covered in more detail on page 28).

Scottish Water is a great place to work

- We have an award-winning Wellbeing programme which looks to foster physical, emotional and financial wellbeing of our staff. Awards include the 2022 HR Network National Awards – 'Health and Wellbeing Award of the Year', and the 'Best Wellbeing Strategy in the Public Sector' at the Great British Workplace Wellbeing Awards in March 2025.
- We support young people to get started in their career, particularly those from areas of social deprivation, through apprenticeships and other opportunities. Scottish Water is one of only eight businesses, and the only utility, in Scotland to have achieved the coveted Investors in Young People – Platinum standard.
- We were awarded Employer's Network for Equality & Inclusion silver status in 2023 and 2024, recognising our efforts in diversity and inclusion. In SR27 we will continue our progress towards ensuring our employees reflect Scotland's diversity in relation to women, minority ethnic people and disabled people.
- Positive actions in recruitment and support for neurodivergent individuals earned us recognition as a Neuro Champion at the 2024 Celebrating Neurodiversity Awards.
- Our "intent to stay" measure indicated that 77% of staff are likely to remain with Scottish Water 18% above the UK wide benchmark.

Excellence in teaching, research and innovation

- We will focus on developing the new skills required for the future in areas such as artificial
 intelligence, carbon reduction technologies, and nature-based solutions and continue
 to champion STEM skills, working with our partners to build the innovation and skills base
 of Scotland.
- Our research and innovation programme is delivered through collaboration across academia in Scotland, the UK and abroad, working with our supply chain and exploring wider opportunities with other water companies. In SR27, our research and innovation programme is aligned with our investment strategy for water, waste water and net zero and towards delivering on our Long-Term Strategy.
- We established the Hydro Nation Chair programme, hosted by the University of Stirling to act as a focal point for Scotland's water-related research. In SR27 we intend to extend this programme with research focused on net zero and circular economy priorities.
- Our commercial subsidiary, Scottish Water Horizons, delivers innovative, profitable and sustainable opportunities to support innovative energy and resource markets, such as heat from sewers and hydrogen, and contribute to Scotland's renewables future. We now host renewable energy generation equivalent to over twice the amount that we consume annually.

Making a difference in the communities we serve

 We see every investment project as an opportunity to increase awareness of Scottish Water and leave a legacy beyond the upgraded and new assets we are delivering. This includes always leaving areas where we work in as good as or better condition than when

- we started, planting trees and landscaping areas. We also spend time with the community through visiting schools or volunteering our time with local groups.
- In partnership with Scottish Swimming, we support children of all ages and abilities to swim through the Learn to Swim programme. So far, this has provided lessons to over 105,000 children and plans to reach another 100,000 by 2025, including 30,000 school pupils. Each week, more than 1,600 adults across Scotland are taking part in Learn to Swim sessions, a figure the campaign is hoping to grow.
- Scottish Water supports mentoring with Career Ready, a national social mobility charity that helps young people build rewarding futures, regardless of their background.
- We partner with MCR Pathways, a charity which seeks to address the gap in life-chances and educational outcomes, between care-experienced young people and their peers. Through this partnership, our people can train as volunteer mentors for young people in their senior school stages, to help them realise their full potential and see more options available to them.
- Each Scottish Water employee is allocated two volunteering days per year to help develop new skills, support communities and charities and have a positive impact on wellbeing. Last year we spent the equivalent of nearly one and a half years volunteering.

Helping to restore our natural environment

- We are increasingly adopting blue-green solutions to manage the impact of rainwater on our network. This approach includes the use of ponds, wetlands, trees, and property-level planters. By harnessing the power of nature, Scottish Water hopes to create a more resilient, sustainable, and beautiful Scotland in SR27 and beyond.
- Through our work to reach net zero and support climate resilience we are creating
 extensive new woodland that everyone can enjoy through active planting of native
 woodland, commercial forests that will support the economy as well as biodiversity, and
 the natural regeneration of biodiverse woodland across our estate.
- We will continue to enhance our environment through responsible stewardship and improved access to our reservoirs. A new team of reservoir rangers has been formed to assist the public, protect the natural habitat, and promote safety at some of our most popular reservoirs. This initiative will also help inform decisions about what visitor experience offerings we may provide in the future.
- Our Top Up Taps provide cool, fresh, clear water which can fill reusable bottles. So far, our taps have dispensed enough water to fill the equivalent of over 13 million single-use plastic bottles. In SR27 we expect to add another 24 Top Up Taps to our network, raising the total number of taps to over 150.

We will play a key role in enabling Scotland's sustainable economic and housing growth

As our population grows, and people change where they live, the demand on our networks and treatment works can increase.

We plan to invest £593 million to ensure there is the necessary strategic water and waste

What our customers have told us about growth

Customers recognise population growth is a challenge, with an increasing need for new housing developments.

Customers had mixed views on enabling growth. Some customers see it as crucial for Scotland and shows Scottish Water is being proactive, while others feel Scottish Water should focus on existing customers due to finite infrastructure. It is believed the cost should be shared with developers and local government. Non-household customers considered enabling growth less important, focusing more on daily operations.

water capacity to facilitate c120,000 new homes and business premises

In SR27 we will:

- Deliver strategic capacity⁵ for all new homes connecting to our water and waste water systems as well as the domestic demand associated with commercial and industrial development.
- Invest in our infrastructure to increase the capacity of existing network assets for water and waste water network infrastructure, directly associated with new development where it is not readily attributable to an individual developer. We will deliver this by utilising income from developers through the infrastructure charge.
- Comply with legislative requirements to relocate and integrate Scottish Water assets as required to accommodate large infrastructure schemes.
- Financially contribute towards new infrastructure to support new developments.

We will encourage development where there is already capacity

We will work with the Scottish Government, local authorities and developers, as early as possible, to encourage development in areas where we have existing capacity at our water sources and treatment works and seek to support developments using our existing assets and infrastructure where possible.

We will encourage developments that look after Scotland's precious water resources

We will encourage water efficient homes and businesses to reduce future demand whilst also considering all possible measures to release capacity in existing assets before requiring enhancement of water and waste water infrastructure. We will seek to create incentives to encourage developers to minimise water usage in their developments, such that they do not increase the total water demand in the area.

We will encourage developments that use nature-based solutions and create green spaces

⁵ Assets such as raw water intakes, water impounding reservoirs, raw water pumping stations and aqueducts, and treatment works.

We already encourage developers to create developments that do not contribute additional surface water to our network. This can be achieved through the installation of Sustainable Urban Drainage Systems, blue-green infrastructure, and permeable surfaces which all mimic natural drainage, slow down the flow of surface water or prevent it from entering our sewer network. In SR27, we aim to explore ways to further incentivise developers to exceed these standards. When constructing in an area, developers can consider methods for their projects to manage surface water from surrounding areas as well.

By adopting this comprehensive approach, developments not only mitigate their own impact on the surface water network but also contribute to the broader management of surface water within the community. This holistic strategy can lead to reduced flooding risks and enhanced resilience of urban areas to climate change.

We continue to strive to connect our customers "just ahead of need"

We will continue to work hard to meet expectations of our customers to enable their developments just ahead of need. This approach receives positive feedback in our Development Customer Experience Measure which we use for continuous improvement.

We do this by identifying where new strategic capacity is required and initiate investigations as developments are confirmed. We consider a number of factors before delivering the required capacity, such as local authority development plans, land ownership status, planning permission status, and developer timescales and build out rates. This means we can be certain that we are investing in the right places at the right time, ensuring we are delivering value for money by minimising the likelihood of redundant capacity.

Case study - Support for growing communities

Winchburgh is one of the fastest-growing communities in Scotland. It is now undergoing a fresh transformation with the planned addition of around 3,800 new homes by 2032 (which represents a fourfold increase in the town's population over the coming years), as well as new commercial developments, community facilities and schools. To support this, we have invested £35 million in a new, state-of-the-art, low-carbon waste water treatment works. Capable of supporting the needs of more than 16,000 people, it replaces the previous works that served fewer than 4,000 customers and had come to the end of its operational life.

Construction commenced in September 2021, using temporary treatment units to boost capacity during early stages of growth while we planned and constructed the new waste water treatment works. We developed the design using modern approaches to construction to maximise off-site fabrication, minimising any disruption to the local community. We also installed a separate access route and bridge to route construction traffic away from residential areas.

The new site uses innovative Nereda® treatment technology, which makes treating waste water significantly more energy efficient and takes up a smaller site footprint compared to conventional treatment process. Thanks to its efficiency and effectiveness, it will help protect the local water environment while providing the capacity needed to support the growing local community. Winchburgh is only the second site in Scotland to use Nereda® technology, following a pioneering project in Inverurie, Aberdeenshire.

Early collaboration with our supply chain partners during the design phase, as well as learnings from the Inverturie project, enabled us to make significant carbon savings which support our journey to net zero emissions by 2040: stainless steel has been used for the main tanks rather than concrete, with reduced excavation and greater use of off-site fabrication; a significant proportion of the site's energy needs have been met by the installation of solar panels to the roof of the control building; and electric vehicle chargers have been installed to support the electrification of our vehicle fleet.





The proposed investments are set out across the four categories detailed below: Waste Water Growth, Water Growth, Infrastructure Investment, and Service Relocations

Enabling Growth Programmes and Investments:

Programme	Description	Investment
Waste water Growth	Provision of Part 4 capacity to meet strategic & local growth requirements.	£391 million
Water Growth	Provide capacity to meet new demand.	£45 million
Infrastructure Investment	Support all local development plan predicted growth and enable economic growth – Water & Waste Water.	£120 million
Service Relocations	Comply with legislative requirements – Water & Waste Water.	£37 million

You can find out more about our approach in our **Enabling Growth Technical Appendix**.

Scotland's tap water remains a source of national pride and is valued as a precious resource

Scottish Water supplies approximately 1.8 billion litres of water to 2.64 million households and 161,000 non-households across Scotland every day, enough to fill approximately 22.5 million bathtubs. In order to play our role in delivering the Water Sector Vision, our Long-Term Strategy is to ensure Scotland's tap water remains a source of national pride and is valued as a precious resource.

Delivering consistently excellent water quality is our highest priority and we are investing £1,581 million to ensure our customers remain proud of the quality of Scotland's tap water

Supplying clear, great tasting water to customers is important to both Scottish Water and our customers. DWQR noted in their Annual Report for 2023 that "the quality of Scotland's drinking water remains amongst the finest in the world" and we aim to keep it that way.

Maintaining our high service levels over the longer term will be challenging

The key challenges to maintaining or improving service relating to water quality include:

- Climate and wider environmental change impacts raw water quality through increasing levels of organics, particulate matter, microbiological loading and nutrient loading (leading to algal growth). This will compromise our ability to meet both well-established regulatory standards and those more recently introduced.
- The need for asset repair, refurbishment and replacement will be ongoing for the treatment processes installed over the past 25 years, as well as for older assets requiring end-of-life replacement, and technology that has become obsolete and needs to be replaced.
- New regulations were enacted in SR21 to reflect most of the requirements of the recast European Drinking Water Directive. This included new standards and tightening of some existing parameters including Haloacetic Acids and Chlorate. Future changes are also expected through the reduction of the lead standard from 10ug/l to 5ug/l by 2035.

What our customers have told us about drinking water quality

Customers consistently express high satisfaction with the quality of drinking water in Scotland, often making connections to national pride and Scotland's identity. Many customers believe the water in Scotland is "the best in the world" and leads in taste and quality.

For many customers, the quality of the drinking water that Scottish Water provides is the most tangible and visible aspect of service and perceive this as the core of what they are paying for. They expect Scottish Water to focus on maintaining the quality of water in the future.

Our research shows that many customers are concerned about health risks of lead pipes. However, they are not fully aware of the scale or scope of the problem and are unsure whether they have lead pipework.

In SR27 we will respond to customers' expectation that we focus on maintaining the quality of water. We will:

- Maintain our assets in line with our management approaches. This investment will allow us to:
 - maintain the capability of our 229 water treatment works, including filtration and disinfection systems, mechanical and electrical equipment, instrumentation and chemical storage facilities and processes;
 - o maintain our 1,243 treated water storage assets and 301 secondary disinfection assets, ensuring that we provide high quality water for our customers; and
 - o manage discolouration through maintenance activities on our distribution network, which covers over 49,000km in pipes.
- Upgrade nine water treatment works to address risks or failures, in addition to the completion of upgrades at a further nine sites included in our SR21 investment. As a result, we will provide improved water quality for c1.35 million customers during the SR27 period. We will also develop solutions for other sites at risk and continue to review their priority for investment.
- Enhance disinfection processes at our water treatment works, including automatic shutdown to reduce the risk of water entering the distribution system in the event of a problem at the treatment works. This will also include provision for the installation of ultra-violet disinfection systems to reduce risks in relation to Cryptosporidium.
- Continue to inspect and maintain our Treated Water Storage assets throughout the distribution network to reduce the risk of bacteria ingress and subsequent failures at customers' taps.
- Reduce the risk of customers being supplied with discoloured water by taking a risk-based approach to cleaning and conditioning our water supply pipes or replacing them where required.

Our activities to improve catchment management and treatment processes will also reduce
the risk of discolouration and taste and odour originating from our source waters and water
treatment works. This will include the delivery of further investment at Carron Valley Water
Treatment Works to minimise the risk of customers in the Falkirk area being affected by repeat
taste and odour events.

Case study - Innovative water treatment

Investment during SR21 has seen the completion of a new Bonnycraig Water Treatment Works serving over 9,000 customers in the Peebles area. The original works was operating above its capacity and would not have been able to accommodate the increasing demand for water from future housing development in the area. It was also failing to meet the required drinking water quality standards, following several Cryptosporidium detections in the treated water. This led to an Enforcement Notice being served by DWQR, requiring the provision of a long-term solution that complies with regulatory requirements, to deliver a reliable quality drinking water supply by December 2022.

Various options were considered for the site before it was determined that an innovative new works, using ceramic membrane filtration technology (identified and evaluated through our Research and Innovation programme), would provide the best long-term solution for customers. This option offered lower carbon, off-site construction of the ceramic membrane modules, enabled delivery to a tight deadline and minimised any impact on the operation of the original treatment process.

This investment provides a compliant water supply for the existing 9,600 customers and a further 4,500 customers over the next 25 years. Additionally, the learning and benefits from Bonnycraig are now being used for other water treatment works adopting ceramic membranes including at Eela (which serves 5,000 customers in mainland Shetland), Black Esk (which serves 40,000 customers in the Dumfries, Lockerbie and Annan areas) and Turriff.

In response to our customers' views on lead pipes, and our regulatory requirements we will:

- Continue to make progress to deliver a lead-free Scotland by removing around 3,000 lead communication pipes per year. These removals will be in response to water quality sample results, when requested by customers or when identified through our mains replacement work.
- Continue to develop plans with stakeholders to deliver a lead-free Scotland in the future, including how we can support customers to remove their lead supply pipes.

We will create new partnerships to use nature-based solutions to improve water quality

We will work across our drinking water catchments to improve the resilience of the water environment, addressing changes in raw water quality caused by climate change that can lead to unpleasant tastes and smells in drinking water. This will involve partnerships with landowners and other stakeholders to assess and implement opportunities for nature-based or catchment solutions. Where these are not effective or suitable, we will utilise enhanced treatment technologies such as ion-exchange or ozone-granular activated carbon (GAC) to reduce organics.

Water Quality Programmes and Investments:

Programme Water Treatment	The investment demand allocated to water treatment is £1,087 million, £655 million of which will enhance our assets to deliver our regulatory requirements and expectations of the DWQR. This includes upgrades to our Water Treatment Works. £432 million is for asset maintenance (AR3) investment, to maintain the capability of our water treatment works, including filtration and disinfection systems, M&E equipment, instrumentation and chemical storage facilities and processes.	Investment £1,087 million
Water Storage	This includes AR3 investment for maintaining our treated water storage and secondary disinfection processes in SR27 of £403 million, ensuring that we provide high quality water for our customers. This also includes enhancement expenditure to improve our ability to inspect and maintain treated water storage tanks through enhancement investment of £18 million.	£421 million
Water Distribution	This includes investment to manage discolouration through maintenance activities (minimising impact on customers thereby improving customer satisfaction).	£30 million
Lead Management	We are investing toward our commitment to reducing lead in our network, through replacing lead communication pipes, maintaining and optimising our phosphate equipment and undertaking additional sampling to identify presence of lead.	£35 million
Raw Water and Catchment Management	We plan to invest £7 million towards catchment management to improve the quality of our raw water sources whilst supporting our Net Zero ambition. In line with the corresponding Letter of Commitment, we will also improve the quality of supplies currently fed directly from our raw water sources up to 54 systems supplying ~150 properties.	£7 million

Full details of our SR27 water quality strategy and investments can be found in the **Water Quality Technical Appendix.**

We are investing £2,076 million to ensure a continuous supply of water

The reliability and resilience of Scotland's water supplies are key components of the shared Water Sector Vision. In order to meet this vision, our Long-Term Strategy is to ensure water is valued as a precious resource.

Maintaining our high service levels over the longer term will be challenging

- Over the next 25 years it is predicted that we will experience warmer, drier summers, and
 an increased population, particularly in the east of Scotland. The amount of water
 available in our raw water systems is expected to fall short of demand requirements by
 240 megalitres per day (Ml/d) during drought conditions. This significant shortfall means
 if we do not take proactive measures to close the gap, customers will be increasingly likely
 to experience disruptions to their water supply.
- Scotland is one of the highest per capita water users in Europe. On average, a person in Scotland uses nearly 20% more than other parts of the UK, and 30% more than in parts of Europe.
- Conversely, our assets and ability to maintain supplies also face increasing threat from more extreme weather conditions such as storm events leading to power outages or localised flooding and varying wet / dry conditions resulting in ground movement causing pipes to burst and leakage to increase.
- Our source-to-tap system includes 199 operational impounding reservoirs, 747 water pumping stations, over 49,000km of pipes and other supporting assets and systems which need to be operated and maintained to provide a continuous supply to over 5 million household customers, along with commercial and industrial users, across Scotland. Our critical, large infrastructure assets, such as dams and trunk mains, require ongoing inspection and maintenance to ensure that they not only maintain supplies for the long-term but do not pose a risk to others from catastrophic failure. Progress is also required to mitigate other high risks to service, including the risk of short-term interruptions to supply associated with asbestos cement pipes⁶. It is also critical that our control, automation and security systems are maintained in line with industry standards and continue to protect our assets from external factors.

What our customers have told us about water supply

Overall, most customers consider Scottish Water to be currently performing well in delivering a reliable and consistent water supply. It is viewed as a fundamental function of Scottish Water. Customers are unlikely to have considered the risks to water continuity presented by the three Long-Term challenges, especially given the perceived abundance of water in Scotland. When informed, they feel Scottish Water should take action to safeguard reliability.

⁶ The safety and quality of drinking water in Scotland is of utmost importance, and there are stringent standards in place to ensure this. These standards govern both the materials used in the construction of the water network and the quality of the drinking water supplied. They are guided by the World Health Organisation (WHO) and are enacted into law through European Directives and Scottish Legislation.

There is no evidence to suggest that drinking water from asbestos cement pipes poses a health risk. This assurance is based on rigorous scientific evaluation and continuous monitoring to ensure the highest standards of water safety are maintained.

What our customers have told us about leakage

Customers can be shocked to learn about leakage levels, although they are also pleased to learn about Scottish Water's improvements in this area. Leakage can be an emotive topic, with many customers feeling that it is a moral issue. Whilst some customers accept economic arguments around the acceptable level of leakage, others feel that leakage should be reduced even if the cost of repair is more than the value of the water lost. Customers make strong connections between leakage and the risks to water resilience and supply posed by the three long-term challenges. They often feel that addressing leakage is part of planning for future water scarcity, recognising that the value of water will rise in the future. High levels of leakage are felt by some to potentially undermine Scottish Water's efforts to change customer water use behaviours.

In SR27, we want to maintain customer satisfaction with the continuity of their water supply. We will:

- Ensure fewer people experience recurring low pressure by reducing the number of customers on our low-pressure register by c13%.
- Reducing the number of properties that incur repeated interruptions to their water supply (measured over a one or three-year period) by c17%.
- Maintain our assets in line with our management approaches. This includes:
 - o maintaining our water distribution networks, which includes over 49,000km of water mains and 1,951 distribution structures.
 - o maintaining the capability of our raw water storage assets, raw water transfers, aqueducts and our underground sources.
 - enhancing resilience and meet future demand. This will help improve connectivity of our existing systems to increase flexibility to move water around and improve resilience in times of drought, particularly in Edinburgh, Fife and Dundee.

We will work to minimise the impact of climate and population changes on water availability. In SR27 we will:

- Improve drought resilience in key areas by addressing the supply-demand balance deficit in Dundee and reducing the deficit gap in other areas including Edinburgh & Lothian and Fife.
- Improve our drought management capability and develop our Strategic Drought Plan.
- Continue to develop our understanding of the impact of climate change on our water resources and assets and develop plans to mitigate these risks. This will include updating our Water Resource Plan and exploring wider catchment planning opportunities with stakeholders.
- Ensure that we have additional water treatment production capacity in key locations including Tiree, Kenmore, Balmichael, and Turriff Water Treatment Works.

- Improve our resilience to storm events by enhancing our ability to mitigate regional power outages and increase the connectivity of our water supply systems at priority sites.
- Update plans to address resilience of supplies and make progress to secure improvements.
- Improve our response and recovery plans and capability.

We will value water as a precious resource. In SR27 we will:

- Reduce leakage by 10%, working toward our long-term objective to reduce leakage by 20% by 2050.
- Make sure all 136,000 non-household customers have smart metering, helping them reduce the water they use.
 - We expect this to deliver demand reduction of 65Ml/d in SR27 and by making leaks easier to find, it will contribute 25Ml/d towards the overall leakage reduction targeted in SR27.
- Accelerate the replacement of our water mains pipes that we know are more likely to burst due to their material by tripling the mains rehabilitation rates, including a programme focused on asbestos cement pipes. This accelerated replacement will ensure all 6,000km are replaced in the next 15 years.

We help our customers value Scotland's precious water resources

Our Long-Term Strategy sets an objective to reduce the amount of water abstracted and treated every day by 240 Ml, helping to make us more resilient to the worst drought Scotland has experienced (to date). Part of this journey will involve lowering water usage, and we will support our customers to be responsible water citizens by providing usage information from household monitors and continuing to support the water efficiency labelling of domestic appliances.

We will implement all viable options to reduce water demand including developing intelligent networks and real time monitoring of flow and pressure.

On an ongoing basis we use various methods of distributing our message around the value of water, including social media, tv and radio adverts and bespoke projects such as "Don't let Skye go dry". We also provide water efficiency advice and devices through our relationship with Energy Saving Trust, using their network of telephone advisers to support customers in reducing energy and water use in the home.

Case study - Domestic smart monitoring trial

In early 2025, a three-year domestic smart monitoring trial was launched in Dundee to find out if providing homeowners with regular information about their water use would significantly reduce domestic demand. Approximately 1,500 households now have smart water insights, enabling them to see how much water they use in their homes each day.

If this pilot is successful, we will roll it out more widely so that collectively we can protect our most precious natural resource, encourage responsible water citizens and create a more efficient water system.

An update on the findings from the first year of the Dundee trial will be provided in the Final Business Plan.





Water Continuity Programmes and Investments:

Programme	Description	Investment
Abstraction, Sources and Raw Water Transfers	The majority of this is assigned to asset maintenance (AR3) £451 million. This investment enables us to maintain the capability of our raw water storage assets, raw water transfers, aqueducts and our underground sources. The majority of this investment (£295 million) is allocated to reservoir safety and resolving matter in the interests of safety identified by the reservoir panel engineers and £97 million allocated to maintain our aqueducts and tunnels.	£451 million
Water Treatment	The investment demand allocated to asset maintenance (AR3) to Water Treatment for maintaining Water Continuity is £30 million, with £18 million allocated to Enhancement investment including restoration of capacity to allow water treatment works to be operated and maintained and sludge storage and disposal.	£48 million
Water Transmission (trunk mains and strategic pipelines)	The investment demand allocated to asset maintenance (AR3) to trunk mains and strategic pipelines is £113 million. This investment enables to maintain the performance of our strategic trunk main networks. The majority of this spend (£98 million) is allocated to	£113 million

Programme Water Pumping Stations	Description maintaining our trunk mains (including asset renewal) and critical maintenance activities to reduce recurring incidents of interruptions to supply. This investment enables us to maintain the performance of our pumping and booster station assets.	Investment £33 million
Water Distribution	This investment enables us to maintain the performance of our water distribution networks and maintain our interruptions to supply performance. This includes £285 million to accelerate the replacement of asbestos cement water mains which have a disproportionate impact of our distribution assets on interruption to supply performance. This accelerated replacement will ensure all 6,000km are replaced in the next 15 years. We have allocated £25 million to managing demand, aimed at reducing network and customer side losses, as well as reducing per capita consumption.	£886m
Resilience and Growth	This will help improve connectivity of our existing systems to increase flexibility to move water around and improve resilience in times of drought, particularly in Edinburgh, Fife and Dundee.	£103 million
Other Programmes	Manage and maintain various assets across regions to ensure they function effectively, and all statutory maintenance requirements are undertaken.	£442 million

Full details of our SR27 water continuity strategy and investments can be found in the **Water Continuity Technical Appendix**.

The quality of our rivers and seas has improved, and our communities are protected from sewer flooding, through collaboration with others

Scottish Water interacts with the water environment in the provision of both our water and waste water service. We abstract raw water from rivers, reservoirs, lochs and groundwater sources and treat this to supply drinking water to our customers. Household waste water and rainwater is collected and conveyed to treatment facilities which remove pollutants and discharge the water back into the environment.

Both water and waste water treatment produce a nutrient rich waste (bioresource) which is also collected and treated to create biosolids which are then safely returned to the environment.

We are committed to managing our interaction with the water environment responsibly, minimising negative impact on it and contributing to its improvement wherever required.

We are investing £2,524 million to help achieve our goal of improving the quality of Scotland's rivers and seas

There are key challenges in progressing these ambitions:

- Extreme weather events will continue to influence the amount of rainwater in our network and increase the variability of the flow and load envelope arriving at waste water treatment works. In turn, this could increase the occurrence of overflow operation and increase the risk of waste water treatment works non-compliance. We will seek to overcome this in part through collaboration with other stakeholders, including the implementation of catchment management solutions and sustainable storm water management such as blue-green infrastructure to slow or reduce the amount of water reaching our treatment works.
- As our asset base ages or becomes obsolete, we need ongoing repair, refurbishment, and
 replacement to maintain or improve service levels and protect the environment. These
 activities must ensure continued service delivery while adapting to climate change
 impacts and growth demand.
- Private Finance Initiatives (PFIs) have historically been used to upgrade and operate waste water and bioresource treatment assets to comply with new legislation being implemented at that time, such as the Urban Wastewater Treatment Directive (UWWTD). This has allowed the capital costs of construction and subsequent operating costs of large assets to be spread across current and future customers. 50% of Scotland's waste water and 80% of Scotland's bioresource has been treated either currently, or historically, by assets operated under long-term PFI contracts, all of which will come to an end by 2040. During SR27, four PFI contracts will expire and come under Scottish Water ownership.
- River Basin Management Plans (RBMP) set out measures for the protection and improvement of the water environment in Scotland. The current plan, RBMP3, was published by SEPA in 2021, and the next plan (RBMP4) is currently in development and will be consulted on during 2026/27 ahead of publication in December 2027. As the next plan has not been defined, we cannot identify the investment required to meet the improvement expectations the plan will set out. In SR27 we will undertake studies to allow for investment priorities to established and planned for in SR33 and beyond.

What our customers have told us about protecting the environment

Customers see Scotland's water environment as one of its greatest assets. They recognise that the condition of rivers and beaches has a country wide economic impact, citing clean beautiful beaches and wildlife as key drivers of tourism. They also recognise the importance of the water environment to communities as places for leisure, drivers of local employment and support of the local ecosystem.

However, customers from urban or semi-rural areas tend to give river/coastal water quality less weight unless they have a negative experience whilst visiting a beach. Customers from the North of Scotland or a rural area/island are typically very positive about river/coastal water quality. Some customers are aware of water quality being tested by SEPA and are reassured by this. The vast majority of household customers use Scotland's rivers and beaches for walking and agree that poor water quality would affect everyone. Non-household customers are generally less concerned unless it impacts their business. Customers generally assess the quality of the water environment by looking for litter, discoloured water, and bad smells.

Not all customers will make the connection between waste water activities and the water environment. However, customers are becoming more aware as a result of recent media coverage.

What our customers have told us about the circular economy

Although customers are not generally aware of the term 'circular economy', they do identify sustainability as a key characteristic for a company to be considered admirable. Supported by explanations of the meaning within a water industry context, customers are in favour of Scottish Water embracing the concept more, drawing a contrast with 'throw away' culture. Business customers tend to prioritise circular economy objectives more highly than household customers and would like to see more information about Scottish Water's plans to do more.

We are aware combined sewer overflows (CSOs) are an issue of increased importance for our customers

The sewer system has a limited capacity and during heavy rainfall it can become overwhelmed by the increased volume of water. To prevent this mixture of rainwater and waste water from flooding homes or public spaces, CSOs act as a pressure release by discharging excess water flows into rivers as licensed by SEPA. It's important to note that the sewer system was not originally designed to handle the current intensity and frequency of rainfall events we now experience. During heavy rain, less than 1% of overflow spills are 'toilet waste' and have limited environmental impact.

In recent years there has been increasing public scrutiny of the negative impacts that UK water companies can have on the water environment. The latest report from SEPA shows that 87% of Scotland's waterbodies are at 'good' or 'high' status for water quality. We recognise that improving

water quality is a shared responsibility. Alongside industry and agriculture, we are committed to playing our part. In agreement with SEPA, we will prioritise addressing overflows that cause harm. We have proposed a robust investment plan for SR27, anchored in our Long-Term Strategy, to remove all discharges that adversely impact the environment.

In response to customers expectation that we maintain river and coastal water quality, in SR27 we will:

- Reduce the number of serious pollution incidents caused by our operations from eight to five, representing a reduction of nearly 40%.
- Reduce Unsatisfactory Intermittent Discharges (UIDs) from the sewer system by 14% to
 protect and enhance the quality of the receiving water bodies through proactively
 predicting issues and focusing our efforts on earlier intervention.
- Install monitors and sensors across our waste water system to create an increasingly intelligent network.

We will develop our opportunities to play our part in the Circular Economy, in SR27 we will:

- Develop and deliver a new Bioresource Treatment Centre at Daldowie and associated Bioresource dewatering hubs in the wider area.
- Integrate PFI assets into Scottish Water asset base, taking advantage of cost and emission saving opportunities whilst managing service risk.

We will respond to stakeholder expectations, in SR27 we will:

- Aspire to improve water abstraction and compensation Controlled Activities Regulations
 (CAR) compliance to 100%, currently at 93% and 65% respectively. Water abstraction and
 compensation CAR compliance ensures that we follow SEPA's requirements on how
 much water we take from the environment. It also involves actions to reduce our
 environmental impact by maintaining or restoring the natural flow and ecological balance
 of the affected water bodies.
- Maintain our high SEPA discharges from waste water treatment works permit compliance above 95%.
- Maintain our current final effluent and pass forward flow compliance position.
- Work with SEPA and other stakeholders to risk assess the potential implications of future legislation.
- Delivering all the remaining objectives detailed in the RBMP3 required to enhance the water environment, as agreed with SEPA.
- Maintaining our 100% sludge (bioresource) compliance performance.
- Maintain our assets in line with our Management Approaches, this will include:
 - maintaining our assets at 1,846 waste water treatment sites;

- maintain our 2771 sewage pumping stations. Activities to be carried out on Mechanical, Electrical, Instrumentation, Controls, Automation (MEICA) & civil assets; and
- the maintenance of PFI assets as transition back to Scottish Water.

We will investigate alternative treatment solutions

As well as larger treatment works covering towns and cities, we have an extensive and diverse small scale asset base covering our more rural customers. During SR27, we will carry out research into small-scale or decentralized passive treatment solutions for rural and remote communities as alternatives to conventional septic tanks. We will further investigate the use of nature-based solutions for waste water treatment. We will look to develop solutions which align to our ambitions such as lowering our use of energy, carbon, and chemicals as well as improving resource recovery, asset resilience and public amenity.

Daldowie Private Finance Initiative (PFI) Return

In west central Scotland, we are evaluating all operationally and economically viable solutions for the Daldowie PFI return and the necessary investments to upgrade bioresource treatment facilities. The current asset is nearing the end of its operational life and is scheduled to return to Scottish Water in 2026. This follows the decision made in 2022 not to extend the PFI contract due to the higher risks and costs that an extension would entail.

For the purposes of this Draft Business Plan, we have adopted a planning assumption of around £462 million, based on the construction of a new asset and the upgrading of key components of satellite sites. This estimate will be further refined as option development progresses and will be reflected in the Final Business Plan. Throughout this process, we will continue to consider all options regarding the future of Daldowie and engage proactively with WICS and SEPA to ensure their views are fully considered in our analysis.

Case study - Real-time overflow monitoring

In December 2021 we published our Improving Urban Waters (IUW) Routemap, setting out our commitments to improve water quality and support objectives in the Scotland River Basin Management Plan (RBMP3). These included: installing monitoring from all combined sewer overflows that discharge to the highest priority waters; publication of overflow data to improve transparency; significantly reduce sewer related debris in the environment; and reduce overflows from the sewer network.

Our first step was to install event duration monitors on network and treatment works overflows (discharging to the highest priority waters, including all designated shellfish and bathing waters) to improve our understanding of how these assets are operating and to provide transparent information on their operation. By the end of December 2024, we had installed over 1,000 new event duration monitors (to meet our IUW commitments), as part of a £500 million programme of investment to transform Scotland's sewer network and improve the country's water environment.

In December 2024 we launched our first online interactive near real time <u>overflow map</u>, showing data from waste water overflows across the country. It provides information on whether an overflow is occurring or has occurred in the last 48 hours, the total duration of the events (48-hour period), date and time of the most recent and previous overflow events, and the priority status for planned future investment. This allows users, local communities and stakeholders to easily access <u>information on overflows</u> across Scotland. We worked with several external stakeholders/groups on the design of the map and associated supporting information to ensure it was accessible and easy to use.

Water Environment Programmes and Investments:

Programme Waste water Treatment	Description AR3 asset maintenance totalling to £778 million at waste water treatment sites across the Scottish region. This includes £284 million for AR3 associated with PFI return sites. Enhancement costs totalling £160 million associated with compliance improvements to legislation, studies, and managing compliance across Scottish water sites.	Investment £937 million
Waste water Bioresource Treatment	Investment for the waste water bioresource treatment asset group, covering the AR3 asset maintenance cost of £107 million at waste water bioresource treatment sites across the Scottish region. The enhancement costs of £515 million is to meeting Industrial Emissions Directives at sludge treatment centres. This includes bioresource enhancement at Daldowie £462 million and £12.6 million at Highland PFI.	£621 million

Programme	Description	Investment
Waste water Sewer Networks	Investment for the sewer network asset group, covering the AR3 asset maintenance cost of £140 million to maintain sewage pumping station sites across the Scottish region. Enhancement costs of £403 million associated with the improvement of unsatisfactory intermittent discharges at overflows in the network for aesthetics and water quality and the installation cost of event duration monitors to improve provide intelligence of the sewer network operations.	£543 million
Waste water Other – Region Wide	AR3 asset maintenance cost of £322 million across Scotland (eg telemetry). Enhancement costs of £53 million associated with our net zero emission targets, improving energy and emissions across our waste water sites, and studies to understand impact of waste water discharges on the water environment.	£375 million
Water Abstraction - Water Resources Environmental Monitoring and Compliance	This constitutes AR3 investment to install or maintain abstraction compensation monitoring equipment.	£1 million
Reservoir Compensation	Enhancement to support compliance with changes to CAR Licence conditions to RBMP3 commitments.	£39 million
Other PFI Transfers	Highland PFI Includes transition to Scottish Water ownership and contractual obligation of fair market value payment. (Additional PFI investment is included in waste water treatment).	£7 million

Full details on our approach can be found in the Water Environment Technical Appendix.

We are investing £950 million to maintain our waste water networks and address sewer flooding risk for our customers, communities and the environment

Sewer flooding can occur due to operational issues, such as blockages, pipe collapses, and other system failures that prevent our assets from working as they should. Sewer flooding can also happen during heavy rainfall when the flow of water exceeds the capacity our sewer network was designed to cope with.

The key challenges to maintaining or improving service include:

- Extreme weather events which are becoming more frequent, resulting in an increased number of sewer flooding incidents. Forecasts indicate that a growing number of customers will face the risk of both internal and external flooding as rainfall intensity continues to rise.
- Urban creep refers to the gradual increase in impermeable surfaces, such as when gardens and green spaces are replaced with driveways, patios, or buildings. These

surfaces prevent rainwater from naturally soaking into the ground, leading to faster runoff into sewer systems and an increased risk of sewer flooding. As urban populations grow, the pressure on sewer system also intensifies.

- We are also working at both a national and international level to influence policy and legislation relating to wet wipe which are a significant cause of sewer blockages.
- The Scottish Government is giving consideration to whether future legislation could strengthen Scotland's approach to how rainwater is managed. Potential opportunities include better enabling Scottish Water and local authorities to plan, deliver, operate, maintain and protect sustainable rainwater drainage infrastructure to support climate adaptation of our urban landscapes.

This is an important investment area for Scottish Water, we must maintain internal sewer flooding performance levels and start to make the long-term shift towards sustainable drainage network which manages rainfall on the surface and reduce internal and external flooding risk.

What our customers have told us about internal sewer flooding

Customers consistently tell us that an internal sewer flood has the highest personal impact of all service issues. Household customers are concerned by the potential health and safety impact of sewage in their homes, whilst business customers express concerns about damage, potential impact on insurance premiums, and reputational damage.

Customers generally feel that addressing internal sewer flooding is important, and a priority for Scottish Water, especially when properties are affected by repeated incidents. However, some customers perceive it as an issue that does not affect many customers and may prioritise other areas of investment which affect more people.

Some customers expect Scottish Water to work in partnership with other organisations such as local authorities and housing developers to manage planning and design issues which can cause flooding issues. They also expect Scottish Water to work with the wider public to address behaviours which can cause internal flooding such as flushing wet wipes.

What our customers have told us about external sewer flooding

As is the case with many aspects of Scottish Water's waste water service, external sewer flooding is not top of mind for most customers, or a major concern. Customers often group external sewer flooding with other types of flooding eg rain on roads. As such, less informed customers can perceive the issue to be part of living in Scotland. However, when it starts to affect homes and businesses customers become concerned. Business customers may be concerned about impact on the accessibility of their premises. When connections are made with sewage, customers are concerned about health and safety. Waste water flooding that impacts culture, tourism or heritage is considered to be damaging to Scotland as a whole.

Customers recognise that external sewer flooding can have significant impact, but do not think that resolving the issue is Scottish Water's sole responsibility. They may expect Scottish Water to work in partnership with others, such as the Scottish Government, local authorities and housing developers to manage the issue. They also expect Scottish Water to work with the wider public to address behaviours which can cause external sewer flooding such as flushing wet wipes.

Customers find internal flooding unacceptable but recognise the high costs in dealing with this issue. In SR27 we will:

- Reduce the number of recorded incidents of repeat internal sewer flooding caused by blockages by 75% and minimise repeat internal sewer flooding caused by overloaded sewers. Both are key aspects of our long-term objective that no customer should experience repeat sewer flooding in their home.
- Maintain the number of properties on the Internal Flooding At Risk Register.
 - Our key focus of SR27 will be to continue to address and resolve internal flooding for our most at risk customers, ensuring that the numbers of properties at risk of repeat internal flooding at the end of SR27 will not exceed the SR21 position, which is forecast to be 406.
- Continue to test the use of mitigation measures to prevent internal or external flooding due to overloaded sewers. These measures could be adopted as permanent solutions, thereby removing properties from the At Risk Registers at a lower cost. In our testing to date, the average cost to mitigate a property against internal flooding is £3,000, with annual maintenance costs averaging £500. This is significantly less than the average cost of implementing a long-term capital scheme, which is approximately £720,000 per property. We intend to leverage this learning in SR27 and will continue to deploy these value-for-money solutions in SR27.

In response to customer feedback, we will address external sewer flooding on a prioritised basis. In SR27 we will:

- Remove 104 areas from the external flooding At Risk Register.
- Focus on addressing the highest priority external sewer flooding clusters which we know can have a significant impact on both individuals and communities.

• Maintain the overall number of external flooding incidents despite the impacts of extreme weather and urban creep.

We will carry out activities which will reduce overall flooding risk. In SR27 we will:

- Continue to increase real-time visibility of our sewers' operation to make the transition to smart sewer networks. The data gained will provide visibility to prevent and reduce the risk of customer flooding or pollution incidents.
- Continue to maintain our hydraulic waste water models on a planned risk basis.
- Carry out our duties as specified in the Flood Risk Management Act.
- Provide and maintain public sewers that can effectively drain surface water from the curtilage of properties under usual rainfall conditions. This will include:
 - o £261 million to maintain 54,690 km of critical and non-critical gravity sewers
 - o £96 million to maintain 1,757 pipe bridges
 - o £149 million to maintain rising mains and values

We understand customers see partnership working as important

We will increase our partnerships and work collaboratively to improve rainwater management and reduce the amount of rainwater entering and being conveyed through our combined sewer system. This will include continuing to help others to divert surface water from their buildings and impermeable areas away from the combined sewer system.

We are investing £15 million in each of our three existing partnerships to jointly plan and prioritise projects in their respective cities:

- Metropolitan Glasgow Strategic Drainage Partnership, which includes parts of North Lanarkshire, South Lanarkshire, Renfrewshire, East Renfrewshire, East Dunbartonshire and West Dunbartonshire.
- Edinburgh and Lothians Strategic Drainage Partnership.
- Water Resilient Dundee Strategic Drainage Partnership.

When identified and agreed, information about these projects will be published.

Approximately 47% of Scotland's population live in areas covered by these strategic partnerships.

We will also invest £9 million to develop new partnerships and expect this will increase the population coverage to around 65%. This is an important step towards our Long-Term Strategy objective to ensure all cities and many larger towns have strategic drainage partnerships. These partnerships and projects, jointly funded with others, will improve our networks' climate resilience whilst providing recreational, biodiversity and aesthetic benefits to these local areas.

We will help our customers reduce demand on the sewer network, helping to keep bills as low as possible

In 2022, we launched our <u>Nature Calls campaign</u> to raise awareness of the impacts of flushing inappropriate items in sewers, causing 36,000 sewer blockages every year. This across-Scotland campaign involving TV, radio, social, digital and partnership collaborations encouraged customers to flush only the three Ps (pee, poo and paper), and built awareness of the impact of plastic wipes on our network as well as the wider environment.

After the campaign launched, between February 2022 and August 2022, sewer chokes reduced by 14% (vs. 12 months previous) saving the business around £700,000. This behaviour change has been sustained – chokes are down by 1,878 a year – a 5% reduction from pre-campaign levels. At a cost of £216 per choke this represents a saving to the business over £400,000 a year.

By continuing to use customer campaigns to reduce demand on our sewers, we aim to avoid 7,000 sewer blockages in SR27, achieving further cost savings and helping customers to keep their bills low. In SR27 we will take a localised approach to target areas with known issues and encourage customers to disconnect their property roof drainage from the waste water network, helping to mitigate the effects of extreme weather.

Case study – Managing rainwater for inner-city communities

Managing rainwater through place-based approaches, using a mix of engineered and nature-based solutions, is a key objective of our Long-Term Strategy, and will increase the resilience of our network and reduce pollution for local and strategic drainage issues. In the Craigleith area of Edinburgh we have partnered with City of Edinburgh Council, developers, and local communities and businesses to deliver two projects which manage rainwater.

A major upgrade to the waste water infrastructure on Craigleith Road was required to mitigate the risk of sewer flooding to homes and local businesses when the combined sewer was overwhelmed during heavy rainfall. Temporary measures had been provided but a permanent solution was required, and the best option was to fully separate the surface water drainage from the combined sewer.

To support this approach we worked with the developer at the former Royal Victora Hospital site, who agreed to incorporate a storm water storage tank into their final design. The tank stores surface flows from roads, roofs and impermeable surfaces, preventing the combined sewer being overwhelmed during heavy rainfall. Once the rain has passed, the stored storm water is then released back into the combined sewer. In addition, over 200m of sewer pipes along Craigleith Road and Orchard Bank Road were enlarged. This project represents a significant investment in the local sewer system and should significantly reduce the risk of future sewer flooding on Craigleith Road. The potential impacts of changes to rainfall amounts due to climate change have been considered throughout the development of this project, to ensure it is 'future-proofed' through to 2050.

A joint project with the City of Edinburgh Council is also removing further rainwater from the combined sewer, through the installation of a swale in Orchard Park. This is collecting surface water from the streets around the park, including Orchard Brae, Orchard Driver and Orchard Crescent. A swale is a shallow channel containing grasses and native plants, that collects, slows down and filters surface water flows before releasing them back into the combined sewer, it increases local biodiversity and amenity value, and the swale in Orchard Park is providing a new attractive focal point in the local community.

Managing Quantity of Flows Programmes and Investments:

Programme Asset Repair, Refurbishment and Replacement (AR3)	Description Asset maintenance requirements for Managing Quantities of Flows (both responsive and planned interventions) including to maintain sewer network assets (pipebridges, waste water pumping mains, waste water outfalls, CSOs, sewer structures, gravity sewers) and waste water network model maintenance.	Investment £592 million
Enhancement	This investment covers all planned activity to: • Maintain the numerical internal flooding at risk register SR21 exit position throughout SR27, with significant risk associated with unit rate.	£359 million
	 Continue to mitigate the impact of internal flooding on customers, where technically feasible, carrying out maintenance on these assets and evaluate their feasibility for a permanent solution. 	
	 Initiatives to reduce the number of repeat internal flooding incidents caused by blockages. 	
	• Deliver a small number of external flooding projects on a priority basis.	
	 Deliver our commitments to meet Flood Risk Management Act duties. 	
	 Develop and deliver surface water removal projects, in collaboration with others, to reduce overall flood risk. 	
	 Support further rollout of customer behaviour campaigns. 	

Full details on our approach can be found in the <u>Managing Quantity of Flows Technical</u> <u>Appendix</u>.

Responding to a changing climate – Delivering towards net zero by 2040

The Scottish Government's declaration of a climate emergency in 2019 has focussed attention on net zero emissions.

We have adopted a leading ambition among UK Water companies to achieve net zero emissions across all our activities

In 2020, we published our Net Zero Emissions Routemap, aiming to become net zero by 2040, five years ahead of the government target. Ministerial Objectives expect us to meet or exceed the government target. Our ambitious routemap is right for Scotland because:

- It is cost effective. Our Energy Efficiency and Renewables programmes will deliver cost efficiencies and reduce carbon emissions.
- It is aligned closely with the UK Climate Change Committee (CCC) advice, the Scottish Government's draft statutory guidance, and emissions hierarchy requirements by advancing process emission innovation and investment.
- It is the approach which provides the greatest carbon capture, water quality and biodiversity potential through the progression of peatland restoration and woodland planting.

The scope of Scottish Water's emissions includes:

- **Operational emissions** emissions associated with the day-to-day delivery of services through operating assets, travel and fuels;
- **Investment emissions** the emissions associated with maintaining and improving assets, including the carbon embodied within the materials we use; and
- Land Carbon losses or gains of carbon across our landholdings.

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What our customers have told us about net zero

Many customers look to Governments and businesses to bear the most responsibility for reducing carbon emissions. Many customers also expect companies to act as good corporate citizens in this respect with environmental sustainability being a key factor in finding an organisation admirable. Increasingly, customers expect companies to be 'carbon neutral'.

Customers are generally supportive of Scottish Water's net zero ambitions, resonating most with younger customers, but also with older customers, who are concerned for future generations. Business customers support Scottish Water taking accountability for carbon neutrality, and feel that the level of ambition is fair. Expectations for investment are more variable. Investing to adapt to effects of climate change (eg increased droughts), can be seen by some customers as addressing the symptom, rather than solving the root cause of carbon emissions. Other customers accept that reducing carbon emissions is important but place a higher priority on Scottish Water's core services.

We understand customers want reduced emissions in a cost-effective way, in SR27 we will:

- Deliver energy efficiency and renewables programmes that will deliver cost efficiencies and reduce carbon emissions by:
 - Investing in advanced anaerobic digestion and energy recovery at Allanfearn Waste Water Treatment Works.
 - Replacing the sludge drying facilities at Daldowie Sludge Treatment Centre with an advanced anaerobic digestion process with energy recovery.
 - Displacing 45GWh of grid electricity through energy efficiency and on-site renewable generation.

- Our efforts to reduce water demand such as leakage reduction, mains renewal and non-domestic metering will support reduced water production, saving energy and costs.
- Implementing monitoring, real-time control and optimising existing waste water systems to reduce emissions
- We will transition to lower emission assets by:
 - o Adopting low emission vehicles and infrastructure as we renew our fleet.
 - Utilising hydro-treated vegetable oil for existing diesel vehicles not yet able to transition.
 - o Transitioning to zero emission systems as heating, ventilation, and air conditioning and other building systems require renewal.
 - o Replacing our Juniper House laboratory, reducing our gas and electricity demands.

Our customers support increased land management and woodland creation. In SR27 we will:

- Restore 500-1000 hectares of actively eroding peatland and continue to manage and maintain our existing peatland.
- Create up to 4,000 hectares of new woodland with 6 million trees through active planting and natural regeneration.

We will reduce the annual carbon in our investments from c100,000 tCO₂e to c70,533 tCO₂e.

- This will be achieved by working with supply chain through the carbon reduction hierarchy set in our PAS 2080:2023⁷ accreditation and will be monitored and incentivised in the SR27 Enterprise Model. We will:
 - o **Avoid:** by exploring alternative means for satisfying the need without a new construction or through reusing and repurposing existing assets.
 - Switch: assess alternative solutions that would reduce whole life carbon emissions through initiatives such as alternative scope and design, alternative low carbon materials and technologies.
 - Improve: identify and adopt solutions, materials and techniques that improve
 the use of resources and design life of assets, including applying circular
 economy principles, nature-based solutions and low carbon construction
 techniques.

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⁷ PAS 2080:2023 guides organizations in holistic carbon management, reducing costs, fostering industry leadership, and adapting to a low-carbon future.

Case study - Peatland restoration at Loch Katrine

We will always look to minimise our carbon emissions from our operations but some of these are difficult to reduce or avoid, so we are also investing in projects that compensate for the carbon these operations emit. This includes creating woodland and restoring peatland on our landholdings.

An example of this is our Loch Katrine land management plan, one of the largest new natural woodland regeneration programmes in Europe. Across the catchment we are creating nearly 4,600 hectares (over 6,000 football pitches) of new woodland and restoring over 400 hectares of peatland and habitat, by 2034. The woodland will contribute to the Great Trossachs Forest at the heart of the Loch Lomond and Trossachs National Park as well as helping to meet our carbon reduction targets by locking up approximately 900,000 tonnes of carbon.

In January 2025 we began work on the peatland restoration element of this plan and have restored over 50 hectares of eroded and exposed peatland so far. Not only will this increase the carbon stored in the land, but it will also protect the water quality for over a million customers in and around Glasgow.



All aspects of our SR27 Draft Business Plan have been considered in terms of impact on our ability to deliver net zero emissions

The choices we make in how we maintain or enhance our services will either reduce or increase the emissions associated with that service. All projects in SR27 are expected to target the lowest carbon outcomes in terms of the emissions associated with investment and the ongoing emissions for the operation of the asset.

Carbon has been integrated in our decision-making at all levels. Our asset management policies, approaches and outcomes must demonstrate how carbon has been considered for embodied carbon associated with delivery and the impact on operational emissions across the life of the asset.

It is important we seek the lowest cost options to deliver net zero. To understand the costs and potential emissions reductions associated with various options we have developed a "marginal abatement cost curve". This ranks interventions and technologies from the lowest to the highest cost to customers per tonne of carbon abated. Scottish Water's preferred pathway to net zero is

informed by the marginal abatement cost curve and aims to deliver net zero at the lowest cost to customers whilst delivering wider benefits.

A range of partnerships is essential to address the challenges of achieving net zero

We will continue to develop strong partnerships with our delivery partners and major supply chain organisations with a focus on reducing emissions resulting from capital investment.

We will continue to work closely with peers, research bodies, and communities of practice to collaborate on the common problem of process emissions.

To deliver land use change for carbon, biodiversity gain and climate resilience we need to work with communities, tenants of our land, neighbouring landowners, regulators and government. Partnerships are bespoke and geographically specific and current examples include Loch Katrine with our tenant, Forestry and Land Scotland. The Angus Glens Partnership comprises Angus Council, NatureScot, Forestry and Land Scotland and landowners focused on how we might improve the carbon, biodiversity and landscape resilience of that area, protecting key water sources from climate change and capturing carbon. Similar partnerships exist in Lothians and Borders.

Joint work is also critical with organisations such as Peatland Action, Scottish Forestry and with researchers such as the James Hutton Institute to understand, plan and deliver land use change.

There remain key areas of research and innovation that are vital to the net zero emissions pathway including:

- **Process science:** process emissions from waste water and sludge remain the most challenging area of emissions. More research and technology development is required to identify methods for treating waste water without liberating significant emissions and to monitor and reduce process emissions from our existing asset base.
- Materials science and capital investment: progress has been made with the supply chain
 and with research partners to explore and develop materials such as low carbon concrete,
 alternative equipment fabrication and low carbon steel. Scottish Water and its partners will
 need to engage in finding and piloting new materials and products to reduce the carbon
 intensity of investment.
- Land based emissions and carbon capture: work with the James Hutton Institute has established an approach and mechanism to target improved carbon capture, but this remains an area of intense research to support global efforts to increase carbon sinks. New information (eg from The International Union for Conservation of Nature, or academic papers) is kept under review to inform Scottish Water's carbon inventory.

Scottish Water will continue to keep the science and guidance under review and actively seek innovative approaches to reduce carbon across our services and investments in SR27.

Investment for net zero emissions will be delivered through a combination of AR3 maintenance funding, and Enhancement

SR27 Net Zero Programmes and Investments:

Programme	Description	Investment
Bioresource Strategy (Enhancement)	The West Central Bioresource Strategy will see new facilities developed at Daldowie and Highlands PFI	Inc. in Water Environment

Programme	Description	Investment
- S	utilising advanced digestion technologies for most Scottish Water sludge.	
Fleet (AR3)	Over the course of SR27 we expect to continue to reduce emissions from our own fleet through the transition of 1,454 vehicles to low or zero emissions.	£127 million
Property and Facilities (AR3)	We will progressively move to zero emission buildings by 2038 in line with Scottish Government expectations for the public estate.	£25 million
Energy (Enhancement)	Energy efficiency and renewable generation on operational sites to deliver 45GWh benefit and reductions in operational energy cost. If a more attractive return is available by installing onsite renewables to power the asset (eg solar PV) it will be considered alongside energy efficiency as we seek to reduce the consumption of grid electricity at our sites.	£46 million
Process Emissions (Enhancement)	In SR27 we need to progress further research and innovation into new technologies to continue to minimise emissions, recover ammonia (preventing nitrous oxide (N_2O) formation) and recover methane as further valuable resources.	£42 million
Carbon Capture (Enhancement)	 During SR27 we will continue working according to the Carbon Capture Management Approach and: Continue restoration and management of 500-1,000 hectares of Scottish Water's peatlands within water catchments (range reflects uncertainties in areas still to be fully surveyed) Continue delivery of the 10-year Loch Katrine Land Management Plan through our tenant Forestry and Land Scotland to deliver over 4,300 hectares of new native woodland, with 3,000 hectares expected in SR27 Work with tenants, stakeholders and regulators to create a further 1,000 hectares of new woodland across our estate. 	£18 million

Full details can be found in the $\underline{\textbf{Climate Mitigation Technical Appendix}}.$

Responding to a changing climate - Climate Change Adaptation

Climate change is an existential threat to the wellbeing of nature, society and our future prosperity, and has specific impacts for the water environment we rely on

We are going to feel the effects of climate change across all the core services we provide through the ability of our:

- environment to provide sufficient good quality water for us to treat and supply to customers;
- waste water systems to cope with extreme weather and still provide a service without impacting the environment;
- systems and the environment to deal with excess rainfall and drain sustainably without flooding customers or assets; and
- people and assets to sustain or recover services, despite disruption to other key infrastructure on which we rely, during events which are projected to become more frequent and intense.

Our climate change strategy is to plan for 2 degrees of warming by 2050 and prepare for 4 degrees by the 2080s

What our customers have told us about addressing climate change

Whilst climate change is acknowledged as an important general issue by many customers, customers can be surprised by the scale of the issue and potential impact on Scottish Water's services. Once discussed, it is seen as important to protect infrastructure against the impacts of climate change and there is an expectation for long-term solutions.

We have done this by:

- Assessing climate change pathways using the UK Met Office UK Climate Projections (UKCP18). Using these pathways to inform our Climate Change Risk Assessment – which captures two types of risk:
 - o acute service impacts such as storm events which directly disrupt service; and
 - o chronic longer-term impacts where change erodes the quality and capacity of natural systems (such as water resources) and infrastructure (like hydraulic capacity).

In 2024, we published our <u>Climate Change Adaptation Plan</u> which sets out in detail the outcome of our risk assessment.

In SR27, we will repeat and refine our risk assessment and use it to refresh our Climate Change Adaptation Plan to support our Long-Term Strategy, future investment planning and to deliver the climate resilience expectations of Scottish Ministers and the Water Sector Vision.

In SR27 we will invest in our operational resilience, asset resilience and service transformation

Operational Resilience focuses on sustaining or recovering services and assets during weather events which are projected to become more frequent and intense. In SR27, we will:

- Invest £32.6 million⁸ in additional standby generators to provide resilience to water supply assets, including during climate change driven events with power outages.
- Continue to respond to increasingly extreme weather events to maintain customer service.

Asset Resilience focuses on how we make our infrastructure more resilient to climate change. In SR27, we will:

- Deliver climate related adaptation in Water Continuity. Supply Demand Balance investment is projected to require £252.5 million, of which climate change adaptation drivers are estimated to contribute £101 million⁹.
- Deliver climate related adaptation in Customer Flooding. Customer Flooding is projected to require £377.7 million, of which climate change adaptation drivers are estimated to contribute £46.9 million¹⁰.
- Invest £5 million in studies to better understand the resilience of our waste water treatment works to climate change risks¹¹.
- Invest £2 million to refresh the Climate Change Risk Assessment with the latest climate projections, pathways and tools. We will use this to understand how risk is changing and the effectiveness of adaptation actions. It will also allow us to develop further tools to inform future climate-related investment.

Service Transformation focuses on new ways of working and managing our catchments to ensure resilient services in a changing climate, as we cannot rely on building our way out of climate change. In SR27, we will:

- Invest in drainage partnerships to collaborate with local authorities to efficiently deliver blue-green infrastructure to reduce high priority surface water flood risk, support the need to adapt to climate change.¹²
- Invest in multi-disciplinary partnerships to transform three pioneer catchments to become more resilient to climate change. These are:
 - The River Dee in Aberdeenshire, a vital drinking water catchment that is currently under threat from climate change and flood risk.
 - o South Esk/Angus Glens, to address drinking water quality and flood risk.
 - River Almond, to address challenges around environmental quality and flooding.

⁸ This investment is detailed in the Water Continuity Technical Appendix

⁹ This investment is detailed in the Water Continuity Technical Appendix

¹⁰ This investment is detailed in the Managing Quantities of Flows Technical Appendix

¹¹ This investment is detailed in the Water environment Technical Appendix

¹² This investment is detailed in the Managing Quantities of Flows Technical Appendix

- Complete our installation of smart metering to non-household customers in SR27, which will reduce consumption and customer side leakage by up to 48Ml/d, and work towards reducing our supply demand balance deficit.
- Invest to restore peatland in our own and third-party catchments to reverse the deterioration of water quality due to climate change and to retain more water in our catchments for drought/flooding resilience.
- Invest in consumer campaigns on the value of water, and importance of only flushing down appropriate items in the toilet or sink to improve waste water network resilience.

Full details can be found in the **Climate Adaptation Technical Appendix**.

CHAPTER NINE Funding

Scottish Water is funded through customer charges and borrowing from the Scottish Government.

Borrowing and Intergenerational Equity

Currently, around 90% of the cost of providing water and waste water services is funded through customer charges.

The Scottish Government has indicated that it will continue to provide £170 million (nominal) borrowing to Scottish Water. As our costs and the size of our investment programme increases, the proportion of total costs that is funded by this £170 million each year will fall. Therefore, the proportion of total costs which are covered by customer bills will increase from 90% to approximately 94%.

The Principles of Charging set out by the Scottish Government require that water charges should be set at a level that is fair and equitable to present and future generations.

Broadly, we take intergenerational equity as meaning that assets are paid for by the people who benefit from the services those assets provide, and that each generation ensures that assets and service levels are resilient and sustainable over the longer term.

Typically, current customer charges are expected to pay for maintaining these long-life assets, such as dams, aqueducts and treatment works that are intended to last beyond the use of the current generation. This means that the current generation is paying for assets which will also be enjoyed by future generations.

In support of this, our proposed level of maintenance investment¹³ during SR27 is approximately 28% higher than in SR21. While this remains below the long-term sustainable level identified in our Management Approaches¹⁴, it represents a deliberate step towards a more sustainable level of investment and charging over the coming investment periods. This approach will allow us to balance the need to maintain our asset base over the long term with the need to consider intergenerational equity and short-term customer affordability.

We will provide a final position regarding customer charges in our SR27 Final Business Plan. This will be submitted to WICS in February 2026.

Customer Charges in 2027-33

The amount we are proposing to invest in SR27 is an increase compared to our investment between 2021 and 2027. This is to ensure that we can continue to provide safe and sustainable services despite a rapidly changing climate, an ageing asset base, and new legislative requirements. This means that customer charges will also need to rise.

Since 2009/10 to the end of 2024/25, household customer bills have increased by a total of 10.3% less than they would if they had risen in line with CPI inflation. If customer bills had increased in line with CPI over that period, Scottish Water would have been able to invest an additional £1.2 billion into our networks and operations.

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¹³ Asset repair, refurbishment and replacement

¹⁴ Management Approaches are policies setting out the criteria under which interventions required to maintain our level of service can be 'triggered' and the cost of this policy approach.

The vast majority of funding for Scottish Water comes directly from our customers via annual bill charges. We have proposed to increase our levels of charges during SR27 by a level of CPI +4% p.a. Raising charges in this way means that we can increase investment levels and ensure that we can appropriately maintain and enhance our assets to meet the challenges we face.

Under this proposal, the average household customer bill will increase from an anticipated £1.38 per day in 2026/27 (to be agreed) to £1.75 per day in 2032/33. The table below shows the increase in proposed annual charges for each year of the 2027-33 period based on the price profile outlined above.

£ per day	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33
Band A	£412	£428	£445	£463	£481	£501	£521
Band B	£480	£499	£519	£540	£562	£584	£608
Band C	£549	£571	£594	£617	£642	£668	£694
Band D	£617	£642	£668	£694	£722	£751	£781
Band E	£754	£785	£816	£849	£883	£918	£955
Band F	£892	£927	£964	£1,003	£1,043	£1,085	£1,128
Band G	£1,029	£1,070	£1,113	£1,157	£1,204	£1,252	£1,302
Band H	£1,235	£1,284	£1,335	£1,389	£1,444	£1,502	£1,562
Average household bills	£504	524	£545	£567	£589	£613	£638

^{*} These figures are presented in current prices (2024/25) and do not take into account CPI inflation over the forecast period. These figures consider the combined bill (water and waste water).

Wholesale charges for services to non-household customers are also proposed to increase by CPI + 4% p.a.

We will deliver our plan efficiently, ensuring that the proposed bill increases provide the best value by balancing the service customers expect with the cost to deliver. Across our operational and capital work, we will use transformation and innovation to ensure we achieve the best possible value for our customers in all that we do. WICS will examine this Draft Business Plan and our Final Business plan before deciding what the customer charges will be.

SECTION THREE

CHAPTER TEN Confidence in our plan

Determining the right level of investment

What our customers have told us about how we make decisions

In general, customers trust Scottish Water to make the right decisions around investment. They believe the organisation has the best interest of customers at heart when it comes to investing in improvement.

To ensure the best value and service for our customers, it is important we understand not just what investments we need to make, but also how best to make them, to realise wider social and environmental benefits where we can, and when is the most cost-efficient time to deliver them. The scale of these potential investments is significant, so we must pursue efficiency opportunities in the management of our assets to deliver the best value for customers. Investing in assets too early can mean we don't get the full benefit from previous investments but leaving it too late can result in negative service impacts for our customers as well as additional costs.

We have improved our investment planning systems and approaches, increasing confidence that we are making the right investment decisions at the right time.

Professor Brian Adey¹⁵ was appointed by WICS as an external assessor to evaluate Scottish Water's asset management and investment decisions capability. His initial assessment in 2018 led to a recommendation for a 10-year improvement roadmap to improve our investment decision making.

Since then, he has continued to review our progress annually, providing structured feedback and assurance to both internal stakeholders and external regulators. In his assessment report for 2023/24, he said we are 'clearly positioning as a leader in asset management across the UK' and his 2024/25 report further stated, 'as Scottish Water prepares its submission for SR27, it has demonstrated that it has matured significantly as an infrastructure management organisation'.

During the SR21 period, we have been enhancing our approaches to asset management more widely, but particularly in relation to investment planning and prioritisation to embrace the move to a more rigorous, dynamic and rolling investment planning process.

This improved approach allows us to continually incorporate the latest evidence into our decision-making, collaborating with stakeholders to ensure the costs and benefits of competing investment priorities are balanced appropriately.

These improvements have allowed us to comprehensively identify the full extent of potential investment demand over SR27, building up a strong bottom-up picture of all needs.

¹⁵ of the Institute of Construction and Infrastructure Management at the Eidgenössische Technische Hochschule Zürich

We also recognise the impact of bills on our customers, which is why we work hard to keep them as low as possible.

By combining this bottom-up analysis with top-down views from our sector stakeholders and extensive customer research, we have carefully assessed a range of potential investment scenarios to understand the impact of different levels of investment. These scenarios are essential for strategic decision-making and ensuring we strike the right balance between levels of service and the cost, keeping our customers' and stakeholders' needs and expectations at the forefront of our planning.

The output of this investment planning process is our recommendation of a Reference Investment Planning Scenario of £8.3 billion in SR27, representing the investment element of our overall £13.4 billion plan.

Our Plan meets draft Ministerial Objectives and our Regulatory Requirements

We have assessed our investment plans against the draft objectives set by Ministers, and we believe our plan offers a balanced approach to affordability while meeting these requirements.

Ministerial	Our investment will:
	Our investment witt.
Objective Water Sector Vision	Publish our Long-Term Strategy which outlines how we will deliver our part in making the Water Sector Vision a reality. Provide support for Hydro Nation Chair, customer and community involvement and benefits, and introduce a community fund to support small-scale, localised initiatives.
Standards of Service	Maintain service levels achieved at the exit of SR21 – accepting more compliance risk in PFI returns and risk of burst frequency.
Asset Maintenance (Long Term)	Continue inspection programme for critical assets. Increase maintenance by 15-20%.
Flooding & Surface Water Management	Maintaining the number of properties on our Internal Sewer Flooding At Risk register and ensuring that we reduce the number of customers experiencing repeat sewer flooding. Build on our existing three strategic drainage partnerships with two new partnerships.
Drinking Water	Address failures at 18 water treatment works serving c1.35 million customers and reduce risk of failures at three water treatment works serving c260,000 customers. Continue to remove lead from the Scottish Water network and support customers to remove private lead pipes. Improve auto shut down / disinfections reliability at priority sites and development of solutions for other water quality failure risk sites.
Environment	Delivering all remaining RBMP3 objectives to enhance the water environment. Establishing and maintaining our current final effluent and pass forward flow compliance position and developing an improvement plan, where we define and deliver first steps.

Ministerial Objective	Our investment will:
	Achieve outcomes in Improving Urban Waters Route Map. Resolution of high priority unsatisfactory intermittent discharges and installation of 1,000 monitors to improve our understanding of network performance.
	Bioresources – Deliver Daldowie and supporting Sludge Treatment Centre sites by 2033. Deliver Industrial Emissions Directive compliance.
Supporting Sustainable Economic Growth	Provide capacity for c120,000 new homes and business premises. Deliver North Berwick and East Stirling Villages.
Circular Economy	Provision made for innovation "lighthouse" projects. Embedding circular economy principles working with supply chain and developers to better manage rainwater, surface water and waste water.
Security & Resilience	We expect to comply with Government guidelines on cyber security (Networks & Information Systems – NIS).
Climate Change, Adaption and Mitigation	Continued progress of the delivery of Net Zero Emissions Routemap. Reduction of 159 ktCO2 and continue to make changes to achieve net zero emissions across operational activities, investment and land management by 2040.
Private Finance Initiatives (PFIs)	Allowance has been made for the return of four PFIs serving a population ofc1.7 million. This will allow us to maintain and enhance service from these sites as they return to Scottish Water ownership.

We will meet our current regulatory commitments with the DWQR by investing in our planned improvements. This investment will help us fulfil our commitments and meet the requirements of Enforcement Notices.

Our investment plans for SR27 meet SEPA's expectations by addressing regulatory commitments, maintaining and improving service levels, and implementing sustainable stormwater management and wastewater treatment solutions.

You can find out more details in our **Investment Planning Technical Appendix**.

Our Plan is affordable

Our SR27 Draft Business Plan sets out our requirement for £13.4 billion total expenditure to deliver the expectations of our customers and stakeholders.

We have carefully considered how this increase in charges should be managed to be fair and affordable for our customers.

What our customers have told us about impacts on their bills

Throughout our SR27 research programme we have been transparent with customers about the impact of each investment scenario on their bills. We have shown customers future charging impacts on as personalised a basis as possible, reflecting their own Council Tax Band or business rates and the level of discount that they receive. We also tested smooth vs. front loaded profiles with customers. While the rationale for front loading charges was broadly understood, and even accepted by many, customers were concerned that Scottish Water would not be able to communicate this rationale to a wider, less informed customer base. They were also concerned that some customers might face affordability issues. Smooth increases were seen as a more acceptable way to introduce bill rises.

Based on current customer research, we propose to increase customer charges steadily over the six-year period. To deliver the investment needed, this will mean bills would rise by CPI +4% each year. By the end of this period, the average customer bill for water and waste water services will increase 26.5% in real terms over the 6 year period. In comparison, average bills in England and Wales will rise by CPI +19.5% in the first year of PR24, followed by annual increases of CPI +3.2%, a real increase of 36% over their 5-year period.

Just over half of households served by Scottish Water are provided with some form of affordability support:

- Water Charges Reduction Scheme (WCRS): for households eligible for Council Tax Reduction, capped at 35% discount on bill. Around one in four customers are eligible.
- Single Persons Discount (25%): provided to households with a single adult occupier eg
 includes one adult living alone and single-parent households. Households eligible for
 WCRS may also be eligible for Single Person Discount. They get the higher of their WCRS
 entitlement or the Single Person Discount (not both). Around a quarter of customers are
 eligible for Single Person Discount only, and one in ten for both WCRS and the Single
 Person Discount.
- Exemptions: 100% exemptions provided for a wide range of situations including full-time students and disability. Around one in 20 customers are eligible.

Following Consumer Scotland's report on water affordability published in 2024, we are working alongside the Scottish Government, Consumer Scotland and WICS to consider recommendations on how to improve the current protections for those who find it hardest to afford to pay and ensure all discounts provide a fair and balanced outcome for customers.

Our Plan is deliverable

We work with our supply chain to manage our existing asset base, deliver improved service levels and connect new customers.

We are confident our procurement teams have established an efficient and resilient supply chain that meets both our current and future requirements. Our supply chain model aligns the way we work and will support us in our efforts to provide broader societal and environmental benefits

where we can. For example, they will support us in our aspiration for 10% of our schemes to include blue-green infrastructure, where applicable, which will enhance biodiversity and improve public spaces. Our investments also create significant employment opportunities in Scotland, both in Scottish Water and our Supply Chain Partners thereby supporting local economies and communities.

We closely assess the capacity of the supply chain to ensure we can deliver the investment we commit to. The supply chain in Scotland is anticipated to be in high demand until at least 2035, driven largely by infrastructure projects in the power and renewables sector. And with many of the UK water utilities having already awarded their frameworks for their next regulatory period, it is critical that we use the right market approach to ensure we have the right supply chain arrangements in place for SR27, that can deliver the necessary capacity and capability.

Our analysis shows that the supply chain needs to grow by 1,000-1,600 people to meet our investment demands. We are confident this can be achieved, and our current procurements are working to support the market.

To facilitate our supply chain to grow, we are improving our supply chain model for SR27 using a new "advanced partnering" Enterprise Model, creating a new digital supply chain and extending some current arrangements that are performing. This includes:

- Using extended length contracts providing stability for our partners.
- Using incentivisation mechanisms to ensure we work with partners in a collaborative way towards common goals.
- Creating a balanced and fair allocation of risk between ourselves and our partners. This
 will reduce potential financial uncertainty for our partners whilst providing cost savings
 and more predictable project outcomes for our customers.

Positive feedback from market testing indicates that the proposed model is seen as transformational, positioning Scottish Water as a "client of choice" in a competitive market and helping to confirm our confidence in delivering on the draft business plan.

We are also considering options to encourage growth through skills academies for graduates and modern apprentices, working with other agencies such as Scottish Enterprise and the Scottish Government. This initiative aims to address constraints on certain skill areas; by collaborating with these agencies, we hope to foster growth ensuring that the water industry in Scotland is seen as an attractive place to work. This approach will help us build a resilient and sustainable workforce, capable of meeting the increased demand for skilled professionals in areas such as commissioning, electrical trades, and general operatives.

You can find out more in our **Supply Chain Technical Appendix**.

Our Plan meets customer priorities

As noted in Chapter 5, the deliberative research process allowed us to test our investment scenarios as they were developed, consider the customer feedback we received, and return to the same customers with our final reference scenario to check we had reflected their views. Customers noted Scottish Water had listened to their original feedback and felt it had been reflected to provide a more balanced, pragmatic scenario which showed a higher level of ambition. This feedback demonstrates directly from customers that the reference scenario we are putting forward in the Draft Business Plan takes account of their views and priorities.

As part of our assurance process, the Independent Customer Group have evaluated the quality of the customer research used in developing the Draft Business Plan. They have reviewed whether the research is credible, comprehensive, unbiased, and adheres to best practices. The Independent Customer Group's Interim Research Assurance Report on the quality of the customer research conducted so far has been provided along with this plan. The Independent Customer Group is satisfied that the baseline information from research synthesis on customer expectations and priorities was a robust starting point for SR27; and the SR27 research so far has been designed and conducted in such a way as to provide a strong understanding of the views of a diverse group of informed household and business customers on current priorities for investment over the review period.

They will provide similar assurance for the Final Business Plan, as well as providing their view on whether the Final Business Plan clearly incorporates and reflects customer feedback.

As a final step of customer engagement Consumer Scotland will introduce a direct customer view as to whether our Final Business Plan commands customer support. This will be achieved by working with the same group of customers over a period of time, asking them to discuss and give feedback on our plans. Consumer Scotland has begun engagement with this group, and the next step will be to ask them to review our Draft Business Plan in full and provide feedback on whether it is meeting their needs and commands their support. We will use the findings from this research to inform our Final Business Plan.

Scottish Water has begun commissioning customer research with a larger number of customers to test the investment and costs laid out in this Draft Business Plan.

Our Plan is cost efficient

As a regulated monopoly working on behalf of the people of Scotland, it is vitally important that Scottish Water operates efficiently so that our customers receive the best possible value for money. Improving how efficiently we operate was a major focus in previous charge control periods, and significant improvements have been made.

We are broadly on track to deliver against our 1% p.a. efficiency challenge set out by WICS in their Final Determination for the 2021-27 period. We expect our Tier 1 costs will be c5.5% below their level as at the entry position for the SR21 period. To meet this challenge our Transformation Programme are on track to contribute £49 million of gross, and £30 million of net, Tier 1 benefits over the SR21 regulatory period.

Our Transformation Programme expects to deliver total cost savings of £433 million during the SR21 period in return for total costs of £259 million (£23 million of which are ongoing costs). The resulting total net benefits of £174 million ensures we reduce our costs and get more value for customers. Our analysis indicates that our capital costs at the start of the SR27 period will reduce by around 6%, as compared with the position at the start of the SR21 period.

You can find out more about our performance and future plans in our <u>Innovation and Transformation Technical Appendix</u>.

We are amongst the leading companies in terms of opex costs

We have collaborated with WICS on the approach to evaluating our performance against other water companies in England and Wales, using water sector econometric models developed by Ofwat and the Competition and Markets Authority. We have also taken into account factors that

are specific to Scottish Water, such as our increased focus on asset maintenance spending and the impact of operating in the Highlands and Islands. This analysis shows that we are amongst the leading companies in terms of opex costs. Therefore, in this Draft Business Plan, we propose no catch-up efficiency in relation to opex costs for SR27.

Our capex efficiency is benchmarked favourably against other water companies in England and Wales

Assessing capex cost efficiency is less suited to econometric modelling techniques used for opex efficiency. In assessing our efficiency proposal, we have applied various techniques and evidence sources to evaluate efficiency, focusing on benchmarking direct and in-direct costs with external consultants:

- External consultants benchmarked our direct construction cost models against equivalent models used by water companies in England and Wales, our costs were 1.3% lower than the industry average.
- Specialist consultants benchmarked our indirect costs, showing that these costs were lower than the industry average.

This analysis shows that our capex efficiency is benchmarked favourably against other water companies in England and Wales. We therefore propose no capex efficiency catch-up. To further strengthen our SR27 Final Business Plan, we will further develop our capex cost evidence base and conduct additional analysis on areas where current evidence suggests that we can improve our cost competitiveness versus peers.

We are proposing an ambitious efficiency target to ensure we provide great value for our customers

A 'frontier' efficiency challenge ensures that even the most efficient companies continue to improve their efficiency over time, benefiting customers.

We propose an ambitious frontier efficiency challenge of 0.8% p.a., which:

- Exceeds the Office of National Statistics UK productivity data trends over 2010-2024, demonstrating our commitment to surpass historical national performance benchmarks.
- Sits at the top of the 'plausible' range identified by Economic Insight for companies in England and Wales, indicating that our target is at the upper limit of what is considered achievable by industry experts.
- Aligns with international data on productivity improvements in comparator industries since 2009, ensuring that our goals are cost efficient on a global scale.

This challenge translates into significant cost savings of approximately £300 million over the regulatory period.

We will deliver genuine efficiency improvements that do not compromise service quality or lead to undesirable outcomes for our customers.

To support us in delivering true efficiency, we propose that the frontier efficiency challenge should apply across both operational and capital costs (totex). This will help us achieve true efficiency by:

• Allowing for greater flexibility in how efficiency improvements are delivered, whether through operating cost efficiencies or capital cost efficiencies.

- Applying the efficiency challenge across all spending categories ensures that all areas of
 expenditure are assessed for potential efficiency gains, leading to a more holistic
 approach to cost management.
- Helping to manage the risk of unintended outcomes, such as underinvestment in capital
 projects or excessive focus on short-term operating cost reductions that could harm
 service quality. It encourages a balanced approach to achieving efficiency improvements.

We propose that totex efficiency would apply to all costs except those not within our control, such as regulatory charges, interest costs, PFI costs and local authority rates.

Real Price Effects (RPEs)

The base measure of inflation in SR27 is the Consumer Price Index (CPI), the commonly used measure of inflation in the UK. As noted in WICS final methodology, there is now extensive regulatory precedent of economic regulators recognising that companies may face input price inflation that is different from general economy-wide consumer price inflation.

Between SR27 Draft and Final Business Plans, we will work with WICS to establish the most effective approach to integrating RPE adjustments. An upfront adjustment to the price settlement would include historical observations combined with forecast evidence in order to present reasonable estimates of RPEs over the control period. An outturn RPE adjustment would allow adjustment to reflect the actual impact of RPEs (and any variation to the level of upfront adjustment used).

Our efficiency evidence and assessments have been shared in advance with WICS and have been subject to peer review. We will continue to refine and improve our evidence based on the feedback that we have received. You can find more information in the **Efficiency Technical Appendix.**

Our Plan is assured

Our customers regard us as the most trusted utility in the UK. To maintain this trust, it is crucial that the information we publish is reliable and credible to both our customers and stakeholders. Our assurance process plays a key role in maintaining this trust by ensuring that our business plan is thoroughly evidenced, aligns with our obligations and customer priorities, and adheres to the WICS Final Methodology.

This is the most comprehensive assurance approach we have taken to date, built upon industry best practice methods to ensure the highest standards of reliability and credibility. We have worked closely with WICS to co-design our process, adopting a risk-based approach which targets proportionate assurance dependent on the level of risk for the business.

Assurance is an ongoing process that helps us identify potential errors, make improvements, and monitor the development of our plan. Unlike audits, which look back at the end of a process, assurance assesses what is done during the process allowing improvements to be made in real-time. Through assurance mapping and risk assessment the areas of highest priority for external assurance were identified.

As mentioned, the ICG has also provided its own assurance report, focusing on the quality of the customer research which has been undertaken to inform this Draft Business Plan

Based on the findings of our assurance process, and the actions taken, the Scottish Water Board has provided their Board Assurance Report at the beginning of this Draft Business Plan.

Our Draft Business Plan is based on a number of assumptions about the future, and circumstances in the 2027-33 period will almost certainly vary from those set out in our plan. Ensuring effective risk management and maintaining appropriate internal and external recourse mechanisms will be key to providing protection for customers from the cost of unforeseen and adverse events not within Scottish Water's management control.

You can find out more about our approach in our Risk & Assurance Technical Appendix.

Our Plan is financed

Scottish Water has developed a comprehensive financial model to ensure we maintain an appropriate level of financial strength. This model has been co-developed with WICS and assured by external consultants EY, ensuring its logical integrity, functionality, and reliability.

Our SR27 Draft Business Plan has been informed by the following financial assumptions and projections:

Revenue

- Household Revenue Growth is assumed at 1.0% p.a. growth rate is a mix of 20,000 new properties per annum and an increase in Band D equivalents.
- Non-household property growth is assumed at 0.2% p.a.
- Non-household property consumption is assumed to decline by 1.5% p.a. which is the average decline over the last five years.
- Infrastructure charges are assumed to increase by CPI each year and are aligned to the household and non-household property growth assumptions set out above.
- Disposals of land, property and vehicles are assumed to contribute c£1.3 million p.a. on average.
- Secondary charges are assumed to increase in line with inflation.

Operating Costs

Over the SR27 period operating costs are assumed to increase with CPI less the annual efficiency commitment of 0.8%, with the following (nominal) step changes:

- Electricity costs are expected to rise by £11.8 million in 27/28 due to the end of our power purchase agreement for half our grid requirements.
- It is expected that the additional costs from alternative sludge disposal will be c£1.8 million per annum in the SR27 period. This is due to a reduction in the disposal routes available for sludge. Further work will be undertaken for the SR27 Final Business Plan to forecast the impact of this issue.
- The impact of the investment programme on operating costs is assumed to be in line with the historic trend of £0.7 million per annum. Additional investment in the SR27 period to support the leakage reduction target is assumed to reduce operating costs by c£1.7 million by the end of the period.
- Bad debt is assumed to increase in line with prices (i.e. CPI +4%) which is approximately £1.0 million increase per annum.

- Our activities to expand Smart Metering for non-household customers is assumed to reduce operating costs by £1.5 million by end of the period due to water demand reduction.
- Interest rates for new debt are assumed at 4.0%. This forecast will be updated for the SR27 Final Business Plan. Net new debt is assumed at £170 nominal¹⁶ million per annum in line with the commissioning letter.
- Corporation tax is estimated to be £68.1 million over 27-33 period and is based on the current corporation tax rates and our allocations to capital allowance pools based on historic outturns. Tax legislation can change over the period and if they were to change would have consequential impact on the tax liability of Scottish Water.
- Reasonable cost contributions have been assumed to be in line with current average annual run-rate of £30 million.

Areas of uncertainty

We have found two areas of uncertainty where it would be more effective and in line with Ethical Business Regulation to allow for annual adjustments:

- As discussed above in relation to the efficiency of our plan, our operating costs have historically experienced a Real Price Effect (RPE) of 0.7% per annum, although this can vary significantly from year to year. As noted above, we will engage further with WICS on the implementation of RPE adjustments, and propose that operating costs should be adjusted annually to reflect the actual RPE.¹⁷
- Scottish Water employees are part of the Strathclyde, Lothian, and Aberdeen (Local Authority) pension funds. As of September 2024, all three funds were in surplus. If this surplus status changes, employer contributions would need to increase. We estimate that if the funds were balanced instead of in surplus, employer contributions would rise by approximately £18 million per year. If the funds move into a deficit, the required contributions will increase further. Instead of making assumptions about future surpluses or deficits, we propose that operating costs be adjusted annually to reflect changes in employer pension contribution rates.

In addition, whilst we are assuming a c10% fall in consumption from the full roll out of smart metering for non-household customers, we have not modelled any impact on revenue, based on the assumption that wholesale charges will be realigned to ensure they continue to be cost reflective.

Private Finance Initiative (PFIs) returning to Scottish Water operation

During the SR27 period, four PFIs will reach the end of their contracts with only one remaining which expires in SR39 (October 2040). As a result of returns, PFI service fees will reduce from £120 million in 2026/27 to £30 million in 2032/33, a reduction of £90 million. Analysis of the expected operating cost on return has been carried out on a site-by-site basis. On a risk basis reflecting uncertainty of the asset condition on return, we estimate that operating costs will increase by £47 million once all four sites are back with Scottish Water. As we progress through the period from 2027 to 2033, we will gain more information about the physical condition and

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¹⁶ In cash terms, not adjusted for inflation

¹⁷ Up front adjustments based on estimates may also be an appropriate, subject to establishing reliable forecasts of key costs.

capability of the assets. The net savings from the return of PFI sites has been used to contribute to the investment planning scenario, which includes necessary improvements for PFI assets.

The ratios of financial strength are forecast to improve over the period as increased charge levels create greater headroom to increase investment in our assets.

Our forecast summary financial flows are set out in the table below:

	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	Total
Revenue	1,833.5	1,918.1	2,006.7	2,099.4	2,196.5	2,298.2	12,352.5
Infrastructure charges	21.1	21.1	21.1	21.1	21.1	21.1	126.9
Disposal proceeds	1.6	1.2	1.2	1.2	1.2	1.2	7.6
Total	1,856.2	1,940.4	2,029.0	2,121.7	2,218.8	2,320.5	12,486.7
Borrowing (net new)	153.7	150.7	147.8	144.9	142.0	139.2	878.3
Grants and contributions	4.5	4.4	4.3	4.3	4.2	4.1	25.8
Total Financing	2,014.5	2,095.5	2,181.1	2,270.8	2,365.0	2,463.9	13,390.8
Operating costs	(560.6)	(558.1)	(579.7)	(584.9)	(587.0)	(591.6)	(3,461.9)
PFI costs	(115.9)	(117.0)	(73.9)	(50.5)	(40.5)	(29.6)	(427.5)
Net Interest cost	(157.3)	(160.5)	(161.9)	(163.0)	(165.6)	(166.6)	(975.0)
RCC	(30.0)	(30.0)	(30.0)	(30.0)	(30.0)	(30.0)	(180.3)
Tax	0.0	(1.0)	(8.1)	(14.3)	(19.7)	(25.1)	(68.1)
To tail costs	(863.8)	(866.7)	(853.7)	(842.8)	(842.9)	(843.0)	(5,112.8)
Cash utilised	27.1	0.0	(0.0)	0.0	(0.0)	0.0	27.1
Change in working capital	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
Contribution to repairs & investment	1.177.8	1,228.8	1,327.4	1.428.1	1,522.2	1.620.9	8,305.

In SR27, we plan to invest £8.3 billion, which will contribute 16% of the £50 billion required to achieve our Long-Term Strategy over the next four investment periods.

Our replacement expenditure during the price control period is currently expected to be lower than our comparable estimate of aggregate economic depreciation. This means that asset lives will continue to increase on average. However, this analysis relies on a number of key assumptions. Further details of the analysis and the assumptions used, including the factors that are likely to contribute to closing this gap as part of our LTS, can be found in Data Table 3 and the associated Commentary document.

You can find out more about our approach to finance in our <u>Maintaining Financial Strength</u> <u>Technical Appendix</u>.

Performance Monitoring

Effective monitoring provides assurance to our customers, stakeholders and regulators that we are delivering value for the investments we have made.

We have made great strides in improving performance since our creation in 2002. However, it is important that we keep the measures and metrics we use under review to ensure we continue to set ourselves ambitious goals to stretch and improve our service.

The WICS methodology requires us to forecast our performance across a series of outcome measures, and these will form the basis of performance monitoring for Scottish Water over SR27. Many of these outcomes are new measures for SR27, and several require us to develop new definitions and calculation approaches. We have also proposed two additional measures,

relating to customer awareness and progress against our Long-Term Strategy, which we believe will bring additional insight into our performance during SR27.

The table below summarises the outcomes we currently forecast for SR27.¹⁸ We believe that these outcomes are ambitious but realistic – taking into account the challenges that we face and the levels of investment that we will be able to deploy in the upcoming regulatory period. We forecast either maintenance of good performance or further improvements in most key areas, but pressure from factors such as extreme weather may mean some limited deterioration of performance in certain areas.

WICS Ref	Short title	Base	2032/33	Rounded % change
	Developer Customer Experience Measure			Cilalige
1.01	(CEM)	81.99	83.04	6%
1.02	Non-household CEM	88.78	89.43	6%
1.03	Retailer Measure of Experience (R-MeX)	9	9	0%
1.04	Household CEM	87.78	88.49	6%
1.05	UK Customer Satisfaction Index	77.9	77.9	0%
1.06	Communities	0	0	-
1.07	Total leakage*	455.9	9.90%	10%
1.08	Zonal leakage in deficit zones*	233	12.90%	13%
1.09	Business demand*	371.5	16.20%	16%
1.10	Per capita consumption (PCC)	177.3	174.3	2%
1.11	Low pressure	30	26	13%
1.12	Unplanned interruptions	6750	6750	0%
1.13	Water Supply Minutes lost	15	15	0%
1.14	Repeat Interruption to Supply	240	200	17%
1.15	Worst historic drought	2,940,760	2,328,000	21%
1.16	Peak demand	654,860	346,000	47%
1.17	Taste & odour	0.51	0.53	-4%
1.18	Discoloration	2.11	2.08	2%
1.19	Lead SW networks	45,550	27,550	39%
1.20	Lead customer pipes	98.01	98.15	7%
1.21	Drinking water compliance	99.93%	99.95%	29%
1.22	Water Risk Assessment Platform	7,975	6,465	19%
1.23	DWQR reported incidents	30	25	16%
1.24	Annual internal sewer flooding	1.57	1.48	6%
1.25	Internal sewer flooding register	1.51	1.51	0%
1.26	Annual external sewer flooding	10.5	11.24	-7%
1.27	External sewer flooding register	11.35	11.88	-5%
1.28	WwTW discharge compliance	96.37%	96.37%	0%
1.29	Serious pollution (EPI Cat 1/2)	8	5	38%
1.30	Total pollution (all categories)	34.8	34.8	0%

¹⁸ There are five measures which do not currently have forecasts. Three measures relating to asset health and biodiversity remain under development, and we do not think it is appropriate to offer forecasts on two measures – the Community CEM (which is covered by other measures) and River Water Quality (which sits within SEPA's remit).

WICS Ref	Short title	Base	2032/33	Rounded % change
1.31	Sludge compliance	0	0	0%
1.32	Discharges (UIDs)	873	748	14%
1.33	River water quality	0	0	-
1.34	Net zero emissions	259,257	84,994	67%
1.35	Operational emissions (W)	62,882	2,314	96%
1.36	Operational emissions (WW)	102,219	35,717	65%
1.37	Baseline emissions	35.74%	8.23%	77%
1.38	Operational emissions (net)	156,908	14,461	91%
1.39	Embodied carbon	102,349	70,533	31%
1.40	Carbon capture/sequestration	-8,193	-23,569	-188%
1.41	Biodiversity land-use	0	4,500	n/a
1.42	Biodiversity outcomes	0	0	-
1.43	Resource recovery	0	0	-
1.44	Asset health	0	0	-

^{*} In line with WICS Guidance, Leakage and Business Demand outcomes are presented as the three-year average percentage reduction in Ml/d from a 2024-25 baseline (with the baseline expressed in Ml/d terms).

You can find out more about our approach to finance in our **Performance Monitoring Technical Appendix.**

Thank you and next steps

This Draft Business Plan is an important step in delivering our Long-Term Strategy, ensuring we continue our work to improve the lives of our customers and communities, and help Scotland to flourish come rain or shine.

We are committed to delivering a plan that meets customers' needs, supports a flourishing Scotland, protects our environment, and embraces new ways of working to deliver long-term value. We would like to thank the 23,000 customers who have given their views and helped shape our plan, this feedback has been instrumental in ensuring our plan reflects the needs and aspirations of the customers and communities we serve.

Together, we are building a future where Scotland's water services are trusted, resilient, sustainable, and aligned with the expectations of our customers and communities.

We would also like to thank stakeholders in the Scottish water sector, WICS, DWQR, SEPA, Consumer Scotland, Scottish Government and the Independent Customer Group, the feedback and challenge we have received to date has helped shape the work we have completed to develop this draft plan.

We will continue to engage with our customers and stakeholders to gather feedback on our Draft Business Plan. On 28 August 2025 we will hold our Annual Consultative Meeting in Dundee, providing an overview of our work on this Draft Business Plan, where we welcome feedback and questions on our proposals. All feedback will be used to inform our Final Business Plan, which will be published on 26 February 2026.

Thank you for your continued support and partnership.