



# Contents Foreword

Foreword	2
Wessex Water - about us	3
Our purpose	4
Delivering against our purpose	5-13
Commitment to the UN sustainable development goals	14
Delivering our 2020 - 2025 business plan	15
Framework rationale	15
Sustainable finance framework	16-22
Case studies	23-30



# Foreword

I am pleased to introduce our Sustainable Finance Framework to align our financing with Wessex Water's strong social and environmental credentials.

We have demonstrated over many years the importance that we place on safeguarding the environment, our people, and the communities that we serve, playing a key role in protecting customer health and wellbeing, supporting business, and safeguarding the natural environment.

Our provision of essential water and waste water services creates a strong relationship between the company, our customers, the environment, and our broader stakeholders. This means the long-term strength of the company is closely linked to our ability to operate sustainably to best serve our stakeholders.

We have a strong track record of operational performance and customer service, and innovation and continuous improvement are core to our culture. As we move towards more nature-based approaches of solving the problems we face, we develop more holistic solutions which deliver multiple benefits for the environment and sustainable results for the future.

This framework allows us to demonstrate how investment in our business makes a positive impact within the south west and provides a means to raise debt finance to achieve our purpose to support our customers' health and wellbeing, and enhance the environment and the diverse communities we serve.

Wessex Water's ambitious business plan to 2025 has, as its foundation, what customers have told us they want from us: affordable bills with increasing support for those on lower incomes, no customer will have to ration water use based on ability to pay, investment in services will be higher, efficiency will be increased, resilience in our assets and infrastructure will improve. And the ability to deal with emerging demands created by climate change and population growth will be embedded in our long-term planning.

Through a Sustainable Finance Framework to finance our plans, investors will be able to monitor how the funding supports delivery of Wessex Water's environmental and sustainability goals.

Wessex Water's ability to create value for all stakeholders in a sustainable manner is core to our beliefs. I look forward to working with all our investors to make this happen.

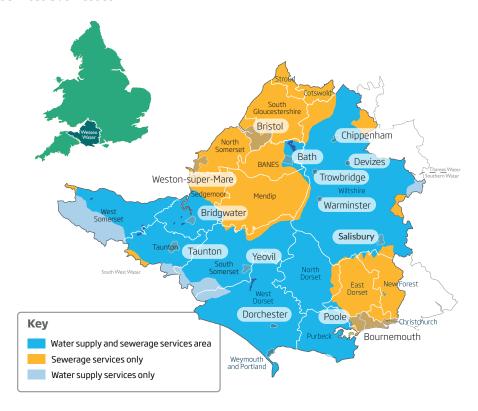
Andy Pymer

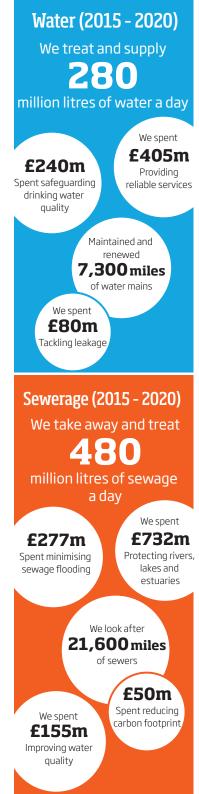
**Andy Pymer** - Director of Finance and Regulation



# Wessex Water - about us

- We are a regional water and sewerage business serving 2.8 million customers across the south west of England.
- The region's landscape is varied, ranging from the Mendip Hills and the Somerset levels to the cliffs of Dorset and Wiltshire's Salisbury Plain.
- The two coastlines have a number of popular holiday resorts such as Weston-super-Mare and Minehead on the north coast and Bournemouth, Poole and Weymouth on the south coast.
- Our area covers 48 designated bathing waters, seven Areas of Outstanding Natural Beauty and three designated UNESCO World Heritage Sites.
- Approximately 75% of the water we supply to our customers comes from boreholes and springs and we work to maintain healthy flows in chalk streams.
- We consistently rank as the best water and sewerage company in the country against the metrics our regulators use to compare us.
- Our Trustpilot ratings showed 87% of reviewers gave us a five-star rating and we once again retained our Customer Service Excellence award.
- The Wessex Water Group (comprising Wessex Water Limited and its subsidiaries) has two principal business streams: the appointed water and wastewater services activities, and our retail, construction, infrastructure and environmental services businesses.





# Our purpose

Our purpose is to support our customers' health and wellbeing, and enhance the environment and the diverse communities we serve.

Our purpose has four main themes, each of which has its own aim.

**Serving people and places:** to provide reliable, affordable services for all customers and communities.

**Enhancing the environment:** to deliver a better environment for nature and people.

**Empowering our people:** to be a great place to work for all.

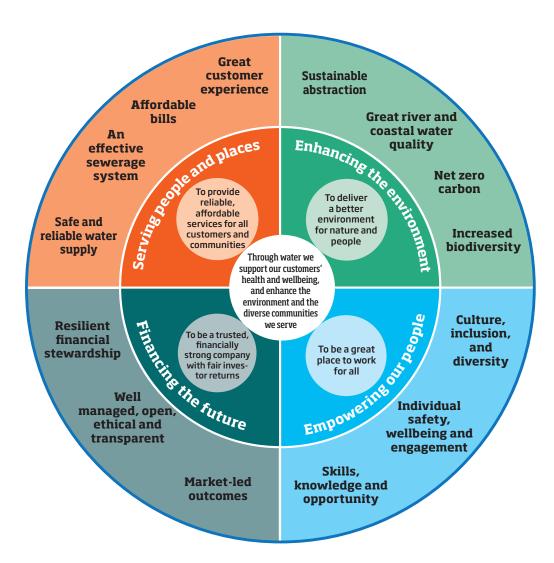
**Financing the future:** to be a trusted, financially strong company with fair investor returns.

We are guided by our new purpose framework, shown in the diagram to the right. This shows the outcomes that we are seeking to achieve in relation to the four themes above.

Our 46 regulatory performance commitments provide evidence of our progress. These were developed in consultation with our customers and other stakeholders. So far, we have met or exceeded our targets on 21 of our performance commitments, nine of which will result in an outperformance payment from Ofwat.

In addition, we benchmark ourselves not just against fellow water companies and utilities, but also against the UK's very best service companies.

Wessex Water's purpose is overseen by our Environment and Public Value Committee. The Committee advises the board on how the company's purpose, strategy and values are developed and delivered, and ensures that the company's culture reflects the needs of the communities that it serves, as well as wider societal and environmental values.



# Delivering against our purpose

Wessex Water has always been strongly focussed on sustainability– as a long-term business, it is central to our company culture. We are constantly working to translate our purpose into practical benefits for people and the environment, and we keep a close eye on emerging issues and opportunities.

### Serving people and places

We recognise the importance of water provision to the local community and the role that we play in everyday life. We support our customers, some of whom are among the most vulnerable in society.

Every Customer Matters – our strategy for supporting vulnerable customers has been created in partnership with and endorsed by independent charities and specialist organisations.

Of our customers, 8% tell us they are unable to afford their water charges. We will make our bills affordable for every household by adjusting them based on ability to pay for those on lower incomes and by helping all customers save water.

As of March 2021, we were supporting 46,000 customers on social tariffs and a further 6,000 on wider tailored assistance programme (**tap**) schemes.

We will look to extend our social tariffs to a total of 86,000 households so that by 2025 one in every 15 households will receive a bill tailored to make it affordable.

We are extending our help towards bill reduction by promoting our risk-free metering service (developed by our Young People's panel) and by increasing the help we give customers to use water wisely.

It's never just about water so many of these services will continue to be co-delivered with our partners in the debt advice sector who are able to look at wider household costs.

### Case study

### Working in partnership with debt advice agencies

- Tackling water poverty is not just about water customers generally have multiple debts.
- Our role is to develop appropriate schemes and to fund and facilitate delivery where we can support our customers.
- We work in partnership with agencies to ensure customers who need the most support are able to gain independent holistic debt advice, budgeting support and an income maximisation service.
- Our first partnership in 2005 led to the development of the industry's first ever social tariff, Assist, in 2007; we now partner with Citizens Advice, StepChange and National Debt Line as well as many cultural and faith organisations, housing associations and local councils.

### Working in partnership with our community

- We participate with local communities, councils and charitable organisations to develop stronger relationships which will allow us to invite and encourage people to contribute.
- We are building on our outreach and engagement programme with students around science, technology, engineering and maths (STEM) subjects and are encouraging our staff to be community ambassadors through our volunteering scheme WaterForce.
- We work with communities to provide financial support for water refill points and drinking fountains to promote health and wellbeing and reduce single use plastic.



### **Enhancing the environment**

#### Good environmental water quality

Our vision is to improve rivers, estuaries and coastal waters in a way that maximises the benefits for society and the wider environment, rather than restricting ourselves to a precise legal obligation.

As an environmental leader, we have committed to improving the health of more than 400 miles of river in our region. We will make further substantial cuts to the number of accidental pollutions and we have a clear ambition to be a carbon neutral company.

Even allowing for a growing population, we have committed to reducing the abstraction of water from the environment. We'll achieve this by reducing leaks and fixing them faster, and by enabling customers and communities to use less water. We also seek out opportunities to share any surplus water with neighbouring regions where water is more scarce.

While the day-to-day performance of our waste water network is strong, it is coming under increasing strain from heavier rainfall events and misuse of the sewer network.

Our long-term planning identifies that, to avoid pollution and sewer flooding, we need to continue our programme of strategic capital investment and work more closely with customers.

At £1.4bn our 2020-25 capital investment programme is our largest ever. It will improve the ecology of local rivers such as the Parrett in Somerset, and the Stour in Dorset by removing phosphorus and nitrogen.

Our investment also supports and generates economic growth and new development in the region. We have worked to identify different ways to achieve outcomes that offer greater environmental benefit at lower cost. These changes have been agreed with the Environment Agency and the savings incorporated into our plan.

### Case study

#### **EnTrade**

Developed in 2016, EnTrade was created to provide an innovative market mechanism for improving the water environment.

The online trading platform allowed us to connect with farmers and test the creation of environmental markets to secure environmental improvements as we scaled up our catchment management approach.

Working collaboratively with farmers, landowners, communities, regulatory groups and councils has enabled nature-based solutions to tackle issues within the environment and identified opportunities beyond asset-based options.

Our work in Poole Harbour represents one of our most successful catchment management projects, negotiated with the Environment Agency and Natural England to offset 40 tonnes of nitrogen from entering Poole Harbour, rather than building a nitrogen removal plant at Dorchester water recycling centre.

The project involved working with more than 100 farmers to prevent over 250 tonnes of nitrogen entering the water, and spending £460,000 with them in AMP6.

In 2020, EnTrade and Wessex Water ran the first multi-benefit auction in Poole Harbour in collaboration with the Environment Agency and Defra under its Environment Land Management Scheme test and trials programme. Farmers were paid for a wider range of benefits, including water quality, biodiversity, carbon and flood prevention.









### Case Study

#### **Water Guardians**

- We have joined forces with Somerset Wildlife Trust to work towards cleaner rivers and good quality habitats for wildlife. Funded by us, the aim of the project is to recruit and train local volunteers the Water Guardians to monitor watercourses, identify possible pollution incidents and report them to Wessex Water for further investigation.
- The project will initially focus on the Brue Valley catchment area within the Somerset Levels and Moors, particularly areas near our assets, pollution hotspots and environmental areas of interest and importance. The Somerset Levels and Moors are working wetlands and areas important for agriculture, an intricately managed landscape full of history, heritage and culture.
- They are also one of Somerset's most protected landscapes for biodiversity, including wintering waterfowl and waders, flower-rich wet grasslands and rich invertebrate communities.



### **Biodiversity**

- Our proactive conservation programme is set out in our Biodiversity Action Plan, through which we aim to halt or reverse biodiversity loss on our land.
- Nearly 63% of our Sites of Special Scientific Interest (SSSI) landholding is considered to be in favourable condition by Natural England with a further 30.5% in unfavourable recovering condition. The government's 25-year Environment Plan includes a target to restore 75% of protected sites to favourable condition.
- Between 2020 and 2025, we are supporting four projects through our Biodiversity Action Plan Partners Programme, including the Wider Wylye Strategy. This brings together a series of projects and programmes to enhance the River Wylye catchment for wildlife and people, and increase the resilience of this unique chalk stream in the face of our rapidly changing climate.

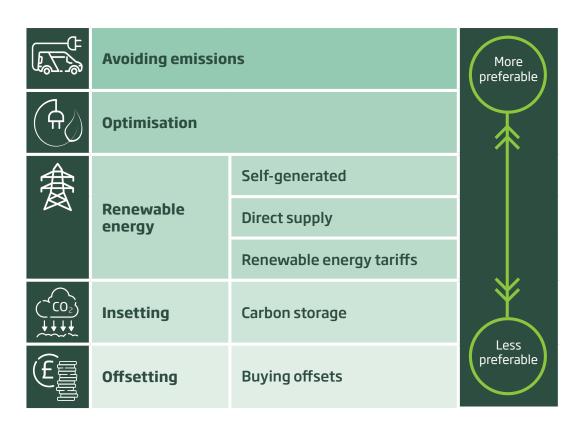
#### Net zero carbon

- By 2030, we aim to achieve net zero operational carbon emissions. These
  are our annual emissions linked to our energy use and transport, plus other
  greenhouse gases that are emitted from sewage and sludge treatment
  processes. We also aim to achieve net zero total carbon emissions by 2040
  at the latest. In addition to our operational emissions this will also include
  supply chain emissions (scope 3) linked to construction materials, and
  consumables such as treatment chemicals. Our 2040 target is 10 years
  ahead of the UK's commitment to achieve net zero carbon emissions by
  2050.
- In 2019-20, our net emissions were 117 kilotonnes of carbon dioxide equivalent. Around 65% of this is related to energy use (predominantly grid electricity), 25% from sewage and sludge process emissions and 10% from transport. We have a long track record of carbon management work through a wide range of activities.
- Our processes to treat, distribute and supply potable water, and to pump and treat waste water, are inherently energy-intensive. However, we have a strong track record of carbon management work. We are continually seeking ways to avoid emissions, to use energy more efficiently by optimising our treatment systems and pumps, and to increase renewable energy generation.
- In line with our commitments to reduce our environmental footprint,
  we track and manage our impact on a gross absolute, net and intensity
  basis, with data calculated using the water industry's Carbon Accounting
  Workbook which is updated and maintained annually. Our annual emissions
  have fallen consistently since 2015 due to our own work to improve energy
  efficiency and renewable energy generation, and the reduced carbon
  intensity of UK-wide electricity generation.

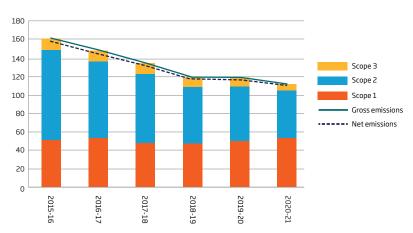
### Intensity metrics

	2020-21	2019-20	Calculation
Water	167	185	kg t CO <sub>2</sub> e / MI water treated
Wastewater	195	142	kg t $CO_2e$ / MI sewage treated (flow to full treatment)

The wastewater intensity metric can fluctuate due to weather - notably the amount of rainfall that is conveyed by the sewerage system - as well as energy use and process emissions.



Wessex Water's recent greenhouse gas emissions, kilotonnes carbon dioxide equivalent ( $ktCO_2e$ ):



Net emissions are gross emissions minus the  $CO_2$ e displaced by renewable energy that we generate and export, except where green energy certificates have also been sold to an end-user.



# Tackling the climate emergency - our routemap to net zero carbon

	Business-as-usual	Readily-available options	Innovative technology
Emissions avoidance	UK Grid electricity -36	Low carbon cars and vans -6  Work with contractors -2  Low carbon combined heat & power -3  Methane control -2  -2	Biochar -20 estimated
Optimisation		Energy efficiency -3  Nitrous oxide control -6	
Renewables		Renewable electricity generation -4  Renewable -25  Renewable electricity generation -20	H <sub>2</sub> Bio Hydrogen Unknown

- Background reductions in the UK's carbon footprint will mean that our energy and transport emissions will fall by around one third from our current position. So we need to take concerted action between now and 2030 to reduce our operational carbon emissions to net zero.
- Some of the options involve methods that are readily available or use technology that is market-ready. For example:
  - emissions avoidance measures such as reducing water use and leakage, increasing the use of lower carbon transport, and promoting nature-based solutions that avoid energy use
  - optimisation measures such as energy efficiency work and systems for monitoring and controlling nitrous oxide from sewage treatment
  - renewable energy increasing the amount of biogas that we generate from anaerobic digestion and pursuing opportunities for wind and solar power, either as generators or as the end-user.

- However, reductions in background emissions and the most readily-available options will not be sufficient to achieve our goal of net zero carbon. We will need to pursue more innovative options involving emerging science and technology, such as turning sewage sludge into biochar, as well as promoting nature-based solutions. While these methods are not yet well-established, we are assessing their maturity and availability and will take part in trials where appropriate.
- As noted above, we will go beyond operational carbon emissions and will also address embodied carbon associated with our supply chain - covering capital carbon and consumables. We expect our embodied carbon to reduce as other heavy industries and manufacturing decarbonise, and in the next two years we will start to publish our own estimates within our annual reporting to provide a total carbon viewpoint.

### **Empowering our people**

### **Diversity**

- We provide our employees with extensive training and education to equip them with the technical, leadership and management skills to be successful in future. We are an equal opportunities employer and we respect and value everyone's contribution.
- We are working to develop STEM skills among children and young people to improve both education and diversity in future, noting that the water industry remains male dominated for the time being.
- We have launched a new partnership with Seetec Plus an organisation supporting people with disabilities to gain employment.
- We have recently been approved for Disability Confident Employer status through the Disability Confident employer scheme.
- We have signed a new partnership with the Race at Work Charter supporting ethnically diverse talent in the workplace.
- We have 21% female employment across the workforce, increasing to 23% within our leadership grades.
- Our gender pay gap is significantly lower than the UK average and reflects gender distribution in job role rather than equal pay issues. By April 2020, our gender pay gap had reduced to 4.8%.
- We have 93% full-time employment with flexibility for part-time and job share as feasible.
- Of our staff 2% have disclosed a disability.



- Protecting the health, safety and welfare of our colleagues, contractors and customers is a shared responsibility and we continue to develop and embed a strong health, safety and wellbeing culture in our day-to-day operations.
- Our aim is for zero accidents and we monitor all accidents, incidents and observations reported by employees. The information we collect assists in determining problem areas or emerging trends and allows resources to be allocated to remove unnecessary risk, and control and manage any residual risk to prevent injury or harm.
- Our continued commitment to high safety standards and performance has again been recognised with our Engineering and Sustainable Delivery (ESD) team awarded the RoSPA Gold Medal (8 consecutive golds) award.





### Financing the future

### **Governance principles**

The Wessex Water board undertook detailed discussions on the suitability, value and impact of various governance frameworks on the company during 2019-2020. Particular consideration was given to the impact on all stakeholders and interest groups. The board considered that its commitment to first-class governance, and in particular social value, was best met with regard to leadership, transparency and governance in accordance with Wates Principles.

Our new Environment and Public Value Committee has been established to advise our board on how Wessex Water's purpose, strategy and values are developed and delivered, to ensure that our culture reflects the needs of all those in the communities that we serve. And to provide a focal point for the board on emerging issues, resilience and diverse ways to meet social and environmental commitments.

The committee's first meetings have focused on a range of topics including the gender pay gap, culture, inclusion and diversity, the development of a refreshed company purpose, net zero carbon, and customer and community engagement. In addition to our business plan community commitments, we also continue to focus on the safety, wellbeing and career development of our colleagues.

### **Ethical policy**

- We are determined to maintain our reputation as a company that observes the highest standards of personal and corporate integrity by adhering to a strict code of business ethics.
- We aim to be the best and value everyone's contribution in our pursuit of excellence. We are honest in the way we conduct our business and we treat one another, our customers and the environment with respect.

### **Modern slavery**

- Wessex Water is committed to meeting the aims of the Modern Slavery Act 2015. We strongly oppose slavery and human trafficking in our supply chains and in any part of our business.
- We would never knowingly engage with suppliers or contractors involved in slavery or human trafficking and our processes are designed to actively identify potential slavery risks.
- We have published our comprehensive 2020 slavery and human trafficking statement on our website.

### **Wessex Water Foundation**

It has never been more important to both respond to the needs of our communities and make a firm commitment to support them for the long-term future.

Launched in 2020 and run in partnership with the Somerset, Wiltshire, Dorset and Quartet Community Foundation, the Wessex Water Foundation provides grants to projects across the Wessex Water region, totalling at least £500,000 per year.

Part of the Wessex Water Foundation, the Covid-19 recovery fund operated during 2020-21 to respond to and support groups as a result of the effects of the pandemic on local communities.

Grants from this fund were distributed to a wide variety of projects across our region. In total, the fund supported 85 groups with grants totalling £175,000, and has improved the lives of more than 70,000 people across our region.

### **Risk management integration**

- Effective management of risk is how we can deliver effective and efficient services to our customers while minimising our impact on the environment.
- It is critical that our risk management framework proactively identifies, evaluates and communicates material risks to our business with appropriately defined and reviewed mitigation strategies.
- Our policy on risk assessment and management is subject to regular review by the board, which is ultimately responsible for risk. Risks are identified throughout the business and appropriate mitigations and controls are determined to align with the board's risk appetite. The Risk Management Group is responsible for the management of risk, reporting to the executive and the board. The Audit and Risk Committee supports the board through review of our internal control systems and processes.
- Operational staff and senior management review, assess and record asset and operational risk monthly, scoring them on a pre-and post-mitigation basis.
- Operational risks act as a foundation for separate tactical risk registers which feed into the corporate risk register.
- The Risk Management Group maintains and reviews all business risks and comprises senior managers from across the whole business. Risks are assessed by subject matter experts and are subject to independent challenge based on the criteria of financial, social and environmental impacts. For those classified as above our tolerance levels additional mitigation measures will be implemented.
- The Risk Management Group provides monthly updates on emergent risks and mitigations to our executive leadership team, comprising our executive directors.
- The CEO submits a bi-annual risk review paper to the board which details the risk review process, identifies principal risks to the business, mitigation methods and other emerging risks.
- The board reviews the risk identification and management policy annually, and reviews the principal risks bi-annually, working in partnership with the Audit and Risk Committee.

#### **Board of directors Audit and Risk Committee** Responsible for regular oversight Monitors risks Reviews effectiveness of risk of risk management, for annual through Board management process with strategic risk review processes and support from Internal Audit management and External Audit reports **Executive Leadership Team** (chaired by Chief Executive) Bi-annually reviews the Cross-functional attendees, Reviews the company's risk company's risk profile and encompassing all Executive management process and makes recommendations to Directors makes recommendations to the Board the Board **Risk Management Group**

# (chaired by Director of Risk and Investment)

Reviews external and internal environment for emerging risks

Performs deep dive reviews of principal risks

Reviews risk register updates from risk owners

Identifies changes to significant risks and the effectiveness and adequacy of mitigating action to achieve agreed risk tolerance levels

Meets monthly and reports to the Executive Leadership Team and Audit and Risk Committee

Cross-functional attendees, encompassing senior management from Operations, Engineering and Construction, Legal, Finance, HR and IT

#### Risk and investment team

Establishes the risk management framework and policy

Facilitates updates to risk registers

Provides resources and training to support process

Prepares reports for Risk Managament Group

#### **Business risk owners**

Carry out day-to-day risk management activities

Identifies and assess risk and implements action to mitigate risk within their area

Updates risk registers

#### Internal audit and compliance functions

Reviews risk management process

Functions provide independent assurance to management and Board on risk status

#### Innovation

We aim to continue to be an acknowledged leader and exemplar of innovation, in ways that benefit the people we serve and the environment around us. Accordingly, we:

- work to understand challenges and opportunities that relate to our work
- are open to trialling new approaches
- build on our internal knowledge and skills and improve our processes as a result
- form partnerships with others where we don't have the knowledge or expertise ourselves.

We are keen to use new technology, data and digital platforms, but we also believe that innovations can be focused on people, behaviour and how we work together.

Examples of some of our more innovative approaches are shown in this framework document. They include EnTrade (p.6 and 26); the use of robotics and big data analysis for managing our sewerage network (p.29 and 30); and Wessex Water Marketplace (p.30)

# Wessex Water is committed to supporting the UN sustainable development goals (SDGs)

We have mapped our environmental and social outcomes to the goals to demonstrate how we are supporting them. Our activities and outcomes, against which we measure our performance, support all 17 goals, with our most material contributions relating to quality clean water supply, water management and supporting development within our local communities. We continue to track and enhance the alignment of our actions to the SDGs over time.



# Commitment to the UN Sustainable Development Goals (UN SDGs)

Wessex Water's outcomes	1 MO POVERTY	2 PERO HUNGER	3 GOOD HEALTH AND WELL-SEING	4 QUALITY EDUCATION	5 CENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AUTORDABLE AND CLEAN EXERCIT	8 DECENT WORK AND ECONOMIC GROWTH	9 MAUSTRY, INMINIATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BRLOW MAJER	15 UPE ON LAND	16 PEACE JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS
Great customer experience	•		0			0					•	0					•
Affordable bills	•	•	0							•		0					•
Safe, reliable water supply			•			•		0	•		•	•	•				•
An effective sewerage system			•			•		0	•		•		•	•			•
Sustainable abstraction						0					0	•		•			•
Great river and coastal water quality						0		0	•		•	•	•	•			•
Net zero carbon						0	•		•		0	0	•	0	0		•
Increased biodiversity									0		0		0	•	•		•
Individual safety, wellbeing and engagement			•									0					•
Skills, knowledge and opportunity			0	•	•	0	0	•	•	•	0						•
Culture, inclusion and diversity			0	0	•					•	0						•
Resilient financial stewardship						0			0				0	0		•	•
Market-led outcomes						•			•			0		•			•
Well managed, open, ethical and transparent					•	•			•	•		•	•	•		•	•

# Delivering our 2020 - 2025 Business Plan

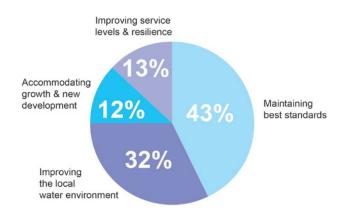
We prepare a business plan every five years in consultation with our customers and our regulator, Ofwat. Our business plan for the 2020 to 2025 AMP7 regulatory period incorporated feedback from 140,000 people through surveys and independent focus groups who gave their opinion on our bills and services.

Our 2020 business plan allows for £1.4bn of capital investment and builds upon an investment programme of £1.2bn between 2015 and 2020. Our business plans guide our capital expenditure investment priorities, underscoring the basis for this Framework. We will deliver:

- lower bills through innovation and efficiency
- improved support for those on lower incomes
- no water use restrictions based on ability to pay
- higher investment in services and best overall service standards of all UK water companies
- improved water system efficiency and resilience, benefiting everyone.

Key business plan objectives include:

- a reduction in sewer flooding incidents
- removing the last remaining lead pipes within our network by 2040
- repairing the vast majority of reported leaks within a day to reduce leakage by 15%
- delivering seven days a week customer service for the convenience of all our customers
- fully integrating a seamless online technology platform for improved customer accessibility, alongside local customer teams and a personalised service for those who need more direct help from us.



# Framework rationale

The Sustainable Finance Framework (the "Framework") aligns our purpose and our business plan commitments to our financing ambitions through the use of targeted financing.

We intend to finance key projects and assets which are fundamental to our purpose and which will deliver tangible environmental and social benefits on an individual and/or combined basis, in addition to achieving global targets formalised by the Paris Agreement on Climate Change, and contributing to the United Nations' Sustainable Development Goals more broadly.

We seek to continue attracting investors who are supportive of our goals and ambitions and will remain valuable long-term partners in supporting our sustainability agenda. Our commitment to delivering a better future will allow our investors to participate in funding our provision of water and waste water services on a sustainable basis.



# Sustainable Finance Framework

Under this Framework, the Wessex Water Group may issue green, social and/or sustainability debt instruments (individually or together, a "Sustainable Financing Instrument(s)") to support our environmental and social objectives, including but not limited to:

- green, social and / or sustainability bonds
- green, social and / or sustainability private placements
- green and / or social loans.

Our Framework aligns to the following principles and guidelines as published by the International Capital Markets Association ("ICMA") and Loan Market Association ("LMA"):

- ICMA Green Bond Principles ("GBP") (June 2021) 1
- ICMA Social Bond Principles ("SBP") (June 2021) <sup>2</sup>
- ICMA Sustainability Bond Guidelines ("SBG") (June 2021) 3
- LMA Green Loan Principles ("GLP") (February 2021) 4
- LMA Social Loan Principles ("SLP") (February 2021) 5.

We intend to follow best market practices where possible and in so doing, have structured our Framework to focus on the four core components of the principles, being:

- 1. Use of proceeds
- 2. Process for project evaluation and selection
- 3. Management of proceeds
- 4. Reporting

### **Use of proceeds**

We intend to allocate amounts at least equivalent to the gross proceeds (the "Proceeds") of Sustainable Financing Instruments issued under this framework to finance or refinance, in whole or in part, a portfolio of eligible projects ("Eligible Projects") which align to the Eligibility Criteria defined below in respect of relevant ICMA categories.

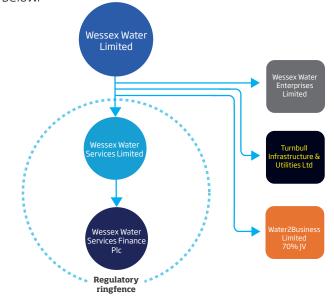
We expect to allocate the proceeds to capital expenditures originated, approved, financed or completed between 36 months before the issuance date of a Sustainable

Financing Instrument to 24 months after the issuance date. The refinancing of existing eligible green or social assets originated at an earlier date may be considered on an exceptional basis and would be measured at asset value.

We may also incorporate relevant operating expenditures <sup>6</sup> aligned to the eligibility criteria where these were incurred more recently than three years prior to the issuance of a Sustainable Financing Instrument.

In no circumstances do we expect to allocate the proceeds of a Sustainable Financing Instrument to finance dividend payments.

This Framework will therefore provide the Wessex Water Group with the ability to issue sustainable finance throughout its business. Wessex Water Services Limited as an appointed provider or water and wastewater services, raises most of its funding directly or via Wessex Water Services Finance Plc. The Wessex Water Group, has a number of business which may raise financing, with the main entities set out in the structure below.



¹https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf

<sup>&</sup>lt;sup>2</sup>https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Social-Bond-Principles-June-2021-140621.pdf

³https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Sustainability-Bond-Guidelines-June-2021-140621.pdf

<sup>4</sup> https://www.lma.eu.com/application/files/9716/1304/3740/Green\_Loan\_Principles\_Feb2021\_V04.pdf

<sup>&</sup>lt;sup>5</sup>https://www.lma.eu.com/application/files/1816/1829/9975/Social\_Loan\_Principles.pdf

Operating expenditures shall mean direct non-capitalised costs which relate to research and development, education and training, building renovation measures, short-term lease, maintenance and repair, and any other direct expenditures relating to the day-to-day servicing of fixed tangible or fixed intangible assets of property, plant and equipment that are necessary to ensure the continued and effective functioning of such assets.

# Environmental outcomes

UN SDGs	Taxonomy alignment	ICMA category	Wessex Water outcome themes	Benefits that we aim to achieve	Examples of eligible projects / methods of delivery	Potential impact metrics
6 CLIAN MATER  6 MO SAMPLINEN  14 LET  BLIOW MATER  ***********************************	Sustainable Use and Protection of Water and Marine Resources	Sustainable Water and Waste water Management	Safe and reliable water supply An effective sewerage system	<ul> <li>Improved drinking water quality</li> <li>Increased resilience of water supply</li> <li>Reduced water losses from the system through leakage</li> <li>Increased resilience of waste water and surface water network</li> </ul>	<ul> <li>Operation and promotion of sustainable alternatives to conventional water management and treatment</li> <li>Improving the resilience of the water supply network</li> <li>Leakage reduction through detection, pinpointing location and repair</li> <li>Improvements in the efficiency of water use through water meter installations, water saving kits and water efficiency audits for customers</li> <li>Work to reduce or mitigate flood risk and maintain sustainable urban drainage systems</li> <li>Water recycling centres (WRCs) and other treatment centres/enhancements</li> <li>Nature based solutions which deliver environmental improvements, such as reducing the nutrient load in catchments</li> </ul>	<ul> <li>Water quality compliance (CRI - compliance risk index)</li> <li>Volume of water leaked - megalitres</li> <li>Water main repairs - number of repairs per 1,000 km</li> <li>Water supply interruptions - minutes per property per year.</li> <li>Lead communication service pipes replaced (WW assets)</li> <li>Waste water pollution incidents - total number of pollution incidents (categories 1 to 3) per 10,000km of sewer</li> <li>Waste water treatment compliance (%) number of failing sites (as a percentage of the total number of discharges)</li> <li>Customer property internal sewer flooding incidents - absolute number of external sewer flooding incidents per year</li> <li>Unplanned outage - percentage of peak week production capacity</li> <li>Risk of sewer flooding in a storm (%)</li> <li>Sewer collapses (nr. incl rising mains)</li> </ul>
14 HP REDWARDS	Sustainable Use and Protection of Water and Marine Resources Protection and Restoration of Biodiversity and Ecosystems	Terrestrial and Aquatic Biodiversity Conservation	Sustainable abstraction Great river and coastal water quality	<ul> <li>Recovery of rivers or improvement in overall river / water quality</li> <li>Greater biodiversity and stronger ecosystems</li> <li>Reduced risk of spread of invasive species</li> </ul>	<ul> <li>River restoration, ecology and/or biodiversity preservation projects</li> <li>River water quality improvements</li> <li>Preservation of watercourses in good ecological and chemical condition, accommodating abstractions, effluent and land run-off</li> <li>Biodiversity net gain improvements</li> <li>Biosecurity implementation</li> </ul>	<ul> <li>Length of river with improved water quality Water Industry National Environment Programme (WINEP) - cumulative kilometres</li> <li>River improved (non-WINEP)</li> <li>Working with communities to improve bathing water experience (nr. bathing waters)</li> <li>Number of water bodies with improvement linked to effluent changes</li> </ul>

Note: "The Framework" takes in account the six environmental objectives set out in the latest EU Taxonomy Regulation. We have also taken into account the recently published 'EU Taxonomy Climate Delegated Acts' in determining the eligible green Uses of Proceeds. Where feasible, we may further update or expand the Framework to align with emerging market standards and best practices, such as the UK taxonomy or other relevant standards and guidelines.

# Environmental outcomes

UN SDGs	Taxonomy alignment	ICMA category	Wessex Water outcome	Benefits that we aim to achieve	Examples of eligible projects / methods of delivery	Potential impact metrics
15 un seume	Protection and Restoration of Biodiversity and Ecosystems	Environmentally Sustainable Management of Living Natural Resources and Land Use	Increased biodiversity	Improving or reducing the overall impact of Wessex Water on land     Land conservation and enhancement	<ul> <li>Preservation or restoration of natural landscapes</li> <li>Delivery and maintenance of wetland environments</li> <li>Natural capital solutions for phosphorus removal</li> <li>Catchment management programmes that promote farming practices that reduce fertiliser and pesticide use</li> </ul>	<ul> <li>Working with catchment partners to improve natural capital (nr. schemes)</li> <li>Land assessed and managed for biodiversity - hectares</li> <li>Number of biodiversity projects undertaken</li> <li>Area of land conserved and enhanced in the region through land management and focused projects and investments - hectares</li> </ul>
12 storocast sto	Pollution Prevention and Control	Pollution Prevention and Control	Net zero carbon  Great river and coastal water quality	<ul> <li>Reduced pollution and lower impacts from water abstraction</li> <li>Reduced airborne emissions</li> </ul>	<ul> <li>Upgrade of sewerage/sewage treatment to reduce pollution incidents</li> <li>Monitoring and control of methane and nitrous oxide systems</li> <li>Development of technological carbon capture such as biochar from sewage sludge pyrolysis, gasification or hydrothermal carbonisation</li> </ul>	<ul> <li>Waste water pollution incidents – total number of pollution incidents (categories 1 to 3) per 10,000km of sewer</li> <li>Risk of sewer flooding in a storm (%)</li> <li>Sewer flooding risk (nr.)</li> <li>Sewer collapses (nr. incl rising mains)</li> <li>Greenhouse gas emissions (ktCO<sub>2</sub>e)</li> <li>Methane leakage and nitrous oxide reduction (kgCO<sub>2</sub>e)</li> </ul>
13 CIMATI	Climate Change Mitigation	Energy Efficiency	Net zero carbon	<ul> <li>Greater energy efficiency</li> <li>Increased energy storage capacity / systems</li> </ul>	<ul> <li>Pump efficiency investments and critical asset replacements / upgrades</li> <li>Smart equipment including metering</li> </ul>	<ul> <li>Average energy consumption of the system, kWh/m3 per cubic meter billed / unbilled authorised water supply</li> <li>Emissions per megalitre of treated water, kg CO₂e/megalitre</li> </ul>
7 AITORAME LING GLIAN TORREY  13 CLIMANT  ACTION	Climate Change Mitigation	Renewable Energy	Net zero carbon	Increased renewable energy generation	<ul> <li>Generation of biogas or biomethane from sewage sludge and other organic waste streams; used for electricity generation, export to the gas grid or vehicles</li> <li>Generation of medium and small-scale hydropower</li> <li>Solar photovoltaic and wind power</li> <li>Battery and thermal storage of renewable energy</li> <li>Recovery of heat from sewage pumping stations and sewers</li> <li>Hydrogen production and storage for use within our activities</li> <li>Investment in, or purchase from off-site verified renewable energy generation</li> <li>Cogeneration of heating/cooling and power from bioenergy and geothermal energy</li> </ul>	<ul> <li>GWh of renewable energy self-generated</li> <li>Avoided emissions from renewable electricity generated, ktCO₂e</li> <li>Avoided emissions (tCO₂e) and energy generation from biomethane export</li> </ul>

# Environmental outcomes

UN SDGs	Taxonomy alignment	ICMA category	Wessex Water outcome themes	Benefits that we aim to achieve	Examples of eligible projects / methods of delivery	Potential Impact Metrics
13 CLIMATI ACTOR	Climate Change Mitigation	Clean Transportation	Net zero carbon	Reduced emissions associated with transport	<ul> <li>Battery electric and hydrogen powered vehicles, charging infrastructure and associated parking spaces</li> <li>Biofuel vehicles, eg, diesel to biomethane, with a carbon intensity of &lt;50gCO₂/km; refuelling infrastructure</li> </ul>	<ul> <li>% of fleet compliant with latest emissions standards</li> <li>Greenhouse gas emissions from fleet vehicles (scope 1)</li> </ul>
13 CLMANI ACTOR	Climate Change Adaptation	Climate Change Adaptation	Safe and reliable water supply  An effective sewerage system  Sustainable abstraction	Reduced risks associated with extreme weather events and gradual changes linked to climate change	<ul> <li>Improving the resilience of sites at risk of flooding</li> <li>Efforts to reduce risk of restrictions during severe drought</li> <li>Addressing impacts on water resource quality</li> <li>Reducing risk of sewer flooding in a storm</li> <li>Reducing risk of waste water odour</li> </ul>	<ul> <li>Number of restrictions on water use (hosepipe bans)</li> <li>Risk of severe restrictions in a drought</li> <li>Risk of sewer flooding in a storm - percentage of the customer population at risk of experiencing severe restrictions in a one -in-200 year drought, on average, over 25 years</li> </ul>
11 SUCCIONALI CITES AND COMMENCIES	Climate Change Mitigation Climate Change Adaptation The Transition to a Circular Economy	Green Buildings	Net zero carbon	Reduced embodied carbon and emissions associated with use of a building	<ul> <li>New developments (EPC rating of A or B)</li> <li>Major refurbishments and renovations (increased EPC score by 2 notches if the score is below C)</li> <li>Note: Includes all relevant development costs including materials, technology, land acquisition costs etc</li> </ul>	<ul> <li>Details of the certifications achieved for new buildings and any improvements resulting in an EPC uplift</li> <li>Number of properties renovated which meet the eligibility criteria</li> </ul>
12 RETURNISHE CONGRETION AND PRODUCTION	The Transition to a Circular Economy	Eco-efficient and / or Circular Economy Adapted Products, Production Techniques and Processes	Enhancing the environment	Increased value and reduced environmental impacts from byproducts	<ul> <li>Increasing value creation from waste via recycling to a substitute products and moving up the waste hierarchy</li> <li>Increasing non-potable water recycling</li> <li>Optimisation of biosolids recycling</li> </ul>	<ul> <li>% of waste diverted from landfill</li> <li>Litres of non-potable water recycled</li> <li>Tonnes of biosolids recycled</li> <li>Total tonnes of waste generated</li> </ul>

# Social outcomes

UN SDGs	Social taxonomy alignment to convention on human rights.	ICMA category	Wessex Water outcome themes	Benefits that we aim to achieve	Examples of eligible projects / methods of delivery	Potential impact metrics
10 REDUCES NODULITES  THE SECONDARIES  T	Improving accessibility of products and services for basic human needs	Access to Essential Services & Affordable Basic Infrastructure	Great customer experience	Access to clean potable water and waste water services	<ul> <li>Maintenance of water assets and services including as necessary to supply water and service all customers</li> <li>Replacement of lead pipes in the network to ensure the network is lead free by 2040</li> <li>Enabling disadvantaged customers (eg, elderly, vulnerable and disabled customers, customers living in remote areas) to maintain access to water supplies through a service that is inclusive and accessible for all</li> <li>Extending social tariffs to more households living below the poverty line</li> <li>Extending water use education and help to reduce bills by promoting risk-free metering services – especially among elderly and undereducated people.</li> </ul>	<ul> <li>C-MeX</li> <li>D-MeX</li> <li>Total bill reduction to customers on social tariffs</li> <li>Lead communication service pipes replaced (WW assets) - number of lead communication pipes replaced</li> <li>Customer reported leaks fixed within a day</li> <li>Priority services register - % customers</li> <li>Volume of water saved through water efficiency - megalitres per day of water consumption reduction</li> <li>Volume of water used per person</li> </ul>
4 DOLLITON  B INCOM MOR AND  CONGNIC CONTIN  10 REDICED  NEGOCITES  \$ \$\frac{1}{2}\$\$	Impact on communities	Socioeconomic Advancement and Empowerment	Serving people and places	<ul> <li>Access to employment and education</li> <li>Access to community amenity and recreational facilities</li> </ul>	<ul> <li>Investment in employee/community education and apprenticeships to empower and educate local communities - especially among those who are unemployed or at risk of unemployment, undereducated or underserved</li> <li>Promoting STEM subjects (Science, Technology, Engineering and Maths)</li> <li>Creating high quality work placements</li> <li>Wessex Water Foundation funding to support the environment and communities</li> <li>Water Force volunteering to help support charities and community groups in our region</li> </ul>	<ul> <li>Training plan - number of people</li> <li>Employees rating company as a good employer - % of employees</li> <li>Number of apprenticeships offered Education:</li> <li>Number of students (0-18) engaged</li> <li>Number of adults engaged</li> <li>Number of schools supported Wessex Water Foundation:</li> <li>Value of funding provided to local communities</li> <li>Number of local people supported through funding</li> <li>Number of local organisations support by funding</li> <li>Number of hours of volunteering donated</li> </ul>

### Process for project evaluation and selection

Wessex Water is a highly regulated entity and as such has established clear practices and policies in relation to assessing key projects and investment priorities.

We will select eligible projects, from expenditure and investment identified within our past, present and future business plans (as relevant), which along with this Sustainable Finance Framework, have been reviewed and approved by the group board.

Wessex Water has established a Sustainable Finance Group, initially led by the group treasurer and comprising members of other relevant departments including, Finance and Regulation, Risk and Investment, Sustainability and Innovation, to oversee and ratify the selection of such projects for financing under the Sustainable Finance Framework, and is responsible for environmental and social risk management of projects.

The Sustainable Finance Group reports to the Director of Finance and Regulation, working alongside the Group Director of Environmental Futures on our Environmental and Public Value Committee.

The Sustainable Finance Group will meet at least semi-annually but more frequently on an ad-hoc basis as necessary, and will be responsible for:

- reviewing projects for eligibility for financing under the Sustainable Finance Framework
- monitoring that the proceeds of Sustainable Financing Instruments are allocated in accordance with defined eligible categories listed within the Sustainable Finance Framework (or otherwise held appropriately pending allocation)
- determining whether any changes are necessary to the allocation of proceeds (due to disposals, cancelled or ineligible projects)
- overseeing collection of data and reporting of information in allocation and impact reporting
- reviewing applicability of the framework for future financing needs (including expenditures and instruments)
- reviewing the framework for relevant and appropriate updates due to changes in generally accepted market practices, guidelines produced by financial industry bodies (including relevant international and or domestic taxonomies) and significant changes in corporate strategy.

### **Management of proceeds**

The proceeds will be carefully managed by our Group Treasurer in accordance with our treasury management processes. The proceeds will be initially paid into our general treasury account and an equivalent amount will be tracked until full allocation of the proceeds. On a best efforts basis, we aim to allocate proceeds within a period of 24 months following issuance or funding (partial or full) of any Sustainable Financing Instrument, subject to sufficient availability of approved eligible projects.

Wessex Water will maintain a register for tracking Sustainable Projects (the "Sustainable Finance Register") to which the proceeds are to be allocated, with associated investments recorded in our accounting systems. This will allow the balance of allocated and unallocated proceeds to be tracked over time. Wessex Water Treasury will oversee the production and maintenance of the Sustainable Finance Register, which will be presented to and discussed with the Sustainable Finance Group at least semi-annually.

Treasury and the Sustainable Finance Group will seek to ensure that the value of assets recorded on the Sustainable Finance Register are at least equal to the amount of Sustainable Financing Instruments outstanding whenever possible.

Pending full allocation, unallocated proceeds will be tracked and managed in accordance with our Group Treasury policy, which may include refinancing or temporary investments (including deposits with money market funds), holding in cash, cash equivalents or other permitted instruments). We may seek to use "green" deposit products where it is economical to do so and terms allow.

We scrutinise deposit-taking institutions and other liquidity funds selected to ensure they meet our minimum credit quality criteria, and seek to avoid knowingly supporting any investment of our liquidity and reserves directly in assets which support sectors including fossil fuels, defence, alcohol, tobacco or gambling.

# Reporting

### **Corporate report**

We comprehensively report our sustainability performance via our website  $^{\scriptscriptstyle 1}$ , our Annual Review and a number of other regulatory reporting documents. We continue to enhance this data for the benefit of our customers and stakeholders – capturing environmental and social benefits which can be linked to the activities supported by Sustainable Financing Instruments.

### Sustainable finance reporting

Within one year of issuance, and annually thereafter until full allocation of the proceeds of a Sustainable Financing Instrument, we will publish a report detailing a breakdown of such allocations and the impact of the instrument. The report will be made available to investors via the Wessex Water website.

### **Allocation reporting**

The allocation reporting will be updated periodically should there be any material amendments following allocation, eg, due to disposals. Our allocation reporting for a Sustainable Financing Instrument will include:

- the amount of proceeds allocated per eligible category
- the split between financing and refinancing
- details of any look back/look forward used
- a selection of relevant case studies or information about material projects financed
- information on remaining unallocated proceeds and how they are being held.

### Impact reporting

Our impact reporting for a Sustainable Financing Instrument will include a selection of relevant impact metrics guided by the list provided on a non-exhaustive basis. Our reporting will be designed to assist investors with determining the quantifiable impact of their financing.

Our methodology will refer to approaches outlined in the Harmonised Framework for Impact Reporting (June 2021) as published by ICMA.

The approach to impact reporting may be updated over time to align with emerging reporting standards and methodologies. We will look to disclose the relevant methodologies used within the annual report.

#### External review and assurance

Wessex Water has obtained a Second Party Opinion from independent verifier DNV GL Business Assurance Services UK Limited ("DNV"), which is an assessment of this Framework. DNV have confirmed the Framework adheres to the, ICMA Green Bond Principles ("GBP"), ICMA Social Bond Principles ("SBP") and ICMA Sustainability Bond Guidelines ("SBG") – (All June 2021), alongside the LMA Green Loan Principles and LMA Social Loan Principles – (both February 2021).

The Second Party Opinion for Wessex Water's Sustainable Finance Framework can be found on <a href="https://corporate.wessexwater.co.uk/our-future/sustainable-finance-framework">https://corporate.wessexwater.co.uk/our-future/sustainable-finance-framework</a>

This review covers issuance of all Sustainable Financing Instruments issued under this Framework.

Wessex Water will engage an independent external verifier to provide third party verification of the allocation report annually until full allocation of a relevant Sustainable Financing Instrument. The level of assurance provided in the report will assure that proceeds from any finance raised under the Framework are being allocated and reported on correctly in accordance with the terms of this Framework to continue providing investors with an appropriately high level of confidence and transparency.

<sup>&</sup>lt;sup>1</sup> https://corporate.wessexwater.co.uk/our-performance

# Case studies

**Investing for the water environment** 

**Reducing our carbon footprint** 

Innovative, sustainable water interventions

Supporting our customers - affordability and vulnerability

Improving customer experience

Innovative technology for asset improvement

Protecting the water environment through advanced data analysis



### Investing for the water environment

We are committed to investing in projects and partnerships that enable us to continue providing our customers with a vital service while also providing wider environmental improvements. There is a growing recognition that increasing the resilience of the environment requires more collaboration across all sectors and communities.

While this is an approach we have taken for some time, our business plans reinforce the desire to strengthen our partnerships so that we can deliver multiple outcomes wherever we can. Many of our performance commitments encourage us to incorporate natural capital benefits into our decision making.

Over the last 20 years we've worked in partnership with the Environment Agency and others to investigate sources where there are concerns about the impact of abstraction on local watercourses and the wildlife that they support.

Most recently 23.5 MI/d of reductions in the River Wylye and River Bourne tributaries of the Hampshire Avon chalk stream have been achieved, made possible by our eight-year, £230m investment in the integrated grid project. This scheme, first proposed in 2009, became fully operational in 2018. It delivers environmental improvements and enhances resilience for our customers without the need to develop new sources.

We have collaborated intensively with the Environment Agency and Natural England to develop the Water Industry National Environment Programme (WINEP) for our 2020-25 asset management planning cycle. There are three main parts to the WINEP: water quality; fisheries, biodiversity and geomorphology, and water resources.

We aim to ensure that there is scientific evidence of the need for environmental improvements; to always consider alternative ways of achieving similar objectives such as catchment solutions rather than asset-based solutions, and to challenge the timescales for delivery.

Through this process we've avoided more than £50m of investment needs, while still delivering the overall

environmental outcome that our regulators require and customers support.

Examples of reductions achieved include:

- Bristol Avon and Little Avon catchments catchmentwide permitting and maximisation of synergies, avoiding disproportionately expensive improvements at small water recycling centres, saving £3m
- catchment offsetting, removing the need for immediate improvements at three works which discharge to groundwater, avoiding £15m of investment
- prioritising investigation of flow issues to ensure a sound science approach is adopted before major investment is scheduled.

It's well known that bathing water quality is affected by numerous factors, not just the quality of the discharges from our water recycling centres and sewerage system.

The WINEP includes a number of schemes focused on bathing and shellfish waters:

- additional treatment at West Huntspill to improve the quality of effluent discharging near the Burnham bathing water
- additional storm storage at Holdenhurst to minimise spills to the River Stour which enters the sea near the Bournemouth and Christchurch bathing waters
- ultraviolet treatment to disinfect the effluent from Corfe Castle water recycling centre, in Dorset, which discharges to Poole Harbour where there are shellfisheries
- investigations at nine bathing waters at risk of not achieving good status, with the aim of determining what work would be required in future to ensure they are rated as good or, where possible, excellent, as well as investigations at a candidate inland bathing water.

Increased investment in waste treatment, network capacity and changing behaviours around sewer use will also allow us to meet the demand for new housing in our region and to increase the resilience of our network, reducing sewer flooding and pollution.







### Reducing our carbon footprint

We are our committed to reducing our carbon footprint, with targets to achieve net zero operational carbon by 2030 and net zero total carbon emissions by 2040. More widely we aim to play an active role in supporting the UK's 2050 net zero carbon target.

We are building on a long track record. We have reported our emissions annually since 1998, and have continually improved our quantification and forecasting of greenhouse gas emissions since then. In recent years we've seen a steady reduction in greenhouse gas emissions, due in part to national changes – notably the decarbonisation of the electricity grid – as well as our own efforts in the areas of energy efficiency and renewable energy generation.

We have a long-standing carbon management plan based on a hierarchy of emissions avoidance, optimisation and renewable energy. This approach formed the basis of our net zero carbon routemap, which was published in summer 2021. The routemap sets out a range of measures that will be needed to reduce our annual operational emissions to zero from the current level of around 110,000 tonnes CO<sub>2</sub> equivalent.

The routemap covers a range of options. Many involve readily-available technologies – some of which are a continuation of current activity – and others which would require innovation. Together, these include the following:

- emissions avoidance eg, further reducing leakage and encouraging water efficiency; using lower carbon transport; promoting nature-based solutions and catchment management; capturing organic matter as biochar
- optimisation eg, improving energy efficiency from existing treatment and network activities; dynamic demand technology that helps balance supply and demand on the local electricity supply network; monitoring and managing nitrous oxide emissions from waste water treatment
- renewable energy increasing biogas generation for energy or vehicles; increased renewable energy from hydro, wind and solar; generating and / or consuming biohydrogen.

As well as operational carbon emissions, we know that we must address embodied carbon – the emissions associated with the materials, products and services that we use. In the next two years we will start publishing our own estimates of our embodied emissions as part of our annual reporting. Additional reporting requirements for embodied emissions will help us better understand the sources of these emissions and identify opportunities to reduce them. This will contribute to our 2040 target of reducing our total carbon footprint including supply chain emissions.

### Increasing our resilience to climate change impacts

As well as reducing greenhouse gas emissions, we recognise the importance of climate change adaptation, ie, adjusting to current or future impacts of a changing climate. The UK's Climate Change Act 2008 requires key organisations (including water companies) to report every six years on climate change risks and steps they are taking to adapt.

As part of this work, we have implemented a range of measures to increase our resilience to the impacts of climate change. This includes:

- creating an integrated water supply grid
- with neighbouring water companies, developing a regional water resources plan with a long-term vision of water resilience
- reducing leakage across our network to ensure a sustainable supply to meet future demand
- development of long-term drainage and waste water management plans and working with partner organisations on surface water management
- stand-by generators installed at sites to ensure continued delivery of service in the event of power failures caused by extreme weather; and raising electrical equipment at sites that are at risk of flooding
- ensuring appropriate health & safety provisions for staff working in extreme heat or other extreme conditions.







### Innovative, sustainable water interventions

EnTrade was established by Wessex Water in 2016 as a platform for buying and selling nature-based solutions. It began in the Poole Harbour catchment, Dorset. In 2015, we successfully negotiated with the Environment Agency and Natural England to offset 40 tonnes of nitrogen from entering Poole Harbour. This was done by working with farmers rather than by building a capital and carbonintensive asset at Dorchester water recycling centre.

EnTrade is now a fully established Wessex Water business that creates and operates online markets in nature-based solutions – such as wetlands, woodlands and grasslands – in multiple catchments. The platform uses a range of different market mechanisms and auction designs to establish prices for nature-based environmental services, including nutrient reduction, carbon sequestration and biodiversity enhancement.

To date, EnTrade has run a series of market events for public, private and voluntary sector buyers of nature-based solutions in catchments across England:

35
1,500
£2.8 million
£1 million

As part of our contribution to a green economic recovery from Covid-19, we are developing three catchment markets for nature-based solutions to environmental problems, using EnTrade as a market operator. The catchment markets will bring buyers and sellers of environmental services from nature-based solutions together to deliver integrated environmental outcomes on the ground.

The markets operate by accrediting the environmental services from nature-based projects, such as wetlands, woodlands and rewilding, in accordance with approved standards, and selling the resulting environmental credits to buyers to meet their regulated or voluntary obligations.

Nutrient reduction is one of the environmental services that will be delivered by specific types of nature-based project as well as carbon sequestration, biodiversity net gain and, longer term, natural flood management and amenity and recreation benefits.

The markets reward cooperation between sectors by lowering the costs of the projects and, by properly accrediting and rewarding the multiple environmental benefits from positive land use change, creating a new revenue stream for farmers and landowners.

In the Bristol Avon catchment, we are kickstarting the market in partnership with the Avon and Wiltshire Wildlife Trusts through the government's Green Recovery Challenge Fund. Under the green recovery initiative EnTrade is also working with the Environment Agency and Natural England in a "regulatory sandbox" to develop the Somerset catchment market.

Wessex Water will meet its environmental obligations through credits supplied by projects in the market. Following Natural England's announcement of the unfavourable condition of the Somerset Levels and Moors Ramsar site, the market will also provide a mechanism for housing developers to meet their planning obligations for nutrient neutrality through credits supplied by the market.

EnTrade's vision is for high-integrity markets for nature-based environmental services to become a major driver of nature recovery across the UK. Mobilising private investment behind the government's commitment to improve the environment within a generation and enabling businesses to deliver net zero and other environmental obligations in a more efficient and cost-effective way.

www.entrade.co.uk





### Supporting our customers - affordability and vulnerability

Through our tailored assistance programme (**tap**) we offer customers a range of schemes and very low-rate tariffs to enable them to afford their ongoing water charges and repay their debt, along with practical help to reduce water and energy bills. Each customer is provided with a tailored solution to meet their own financial circumstances. Just over 15,000 customers are receiving discounts of up to 90% through our Assist tariff. Many of our customers use a number of the following **tap** schemes together.



#### **Assist tariff**

Assist was introduced as a win-win tariff in 2007, the first in the industry. It has six bands, and the customer is placed on the band closest to their ability to pay. To be eligible, customers normally need to seek holistic debt advice and complete a standard financial statement. The tariff offers bill discounts of up, to 90%. The average bill reduction for customers on the Assist tariff is around £220. These customers contribute, on average, £50 more than they did before, which is more than the cost of administering the tariff.

#### Restart

Restart rewards the customer for paying their bill and, importantly leads to a change in behaviour. In year one the customer pays their current year charges and any notional contribution towards their debt and we write off an equivalent amount. In year two the customer again pays their current year charges plus any notional amount towards their debt and then we clear the remaining balance,

however large. At the end of the two years the customer is back on track with more than 89% continuing to engage and pay their ongoing water charges.

#### **WaterSure Plus**

WaterSure Plus is an enhancement to the government mandated WaterSure scheme, which reduces the annual bill to bring it in line with the average metered bill rather than the average domestic bill.

### Discount for low income pensioners

In April 2016 following further consultation with our customers and stakeholders we introduced our discount for low income pensioners. If state pension is a customer's only income or they receive Pension Credit we offer a discount of around £60 off their bill. As of March 2021, we were supporting 46,000 on social tariffs and a further 6,000 on wider **tap** schemes . We will look to extend our social tariffs to a total of 86,000 households so that by 2025 one in every 15 households will receive a bill tailored to make it affordable. We will also continue to extend our help to reduce bills by promoting our risk-free Money Back Guarantee metering service (developed by our Young People's Panel) and by increasing the help we give customers to use water wisely.

Our range of water efficiency services including our online water calculator GetWaterFit and in-home device fitting and advice service, Home Check, also helps customers reduce their water use and manage their bill.

Partnerships with the debt advice sector mean that customers who need the most support from us are able to gain independent holistic debt advice, budgeting support and an income maximisation service. In return we are far more likely to receive a sustainable offer of payment based on true ability to pay.

While our first partnership was formed in 2005, and led to the development of Assist in 2007, we now partner with all Citizens Advice across our region, StepChange, National Debt Line and many cultural and faith organisations that provide debt assistance, as well as tenant support workers in housing associations and local councils.





### Improving customer experience

We want to be in the top 20 of all consumer facing organisations in the UK for customer service.

We are pleased to remain one of the top performers in the water sector for customer service, placed first of all the water and sewerage companies in C-MeX, Ofwat's measure of customer experience.

CCW, the independent voice for water consumers, confirmed that we continue to have the lowest number of complaints of all the water and sewerage companies and 78% of our customers rated our service as good or very good value for money.

In 2021, we again received the Customer Service Excellence award and achieved the Service Mark with distinction from the Institute of Customer Service, one of only 15 companies to hold the accreditation to this level. Separately, the Institute runs a survey of customers and we have set ourselves the challenge of being in the top 20 UK service providers on the survey by 2025.

We're continually seeking opportunities to improve the experience for our customers and will implement a range of measures to ensure the best service:

- give a truly seven-day-a-week service for our customers' convenience
- constantly optimise our services based on real-time feedback
  - Positive outcomes
    for our
    customers

    Inclusive

    Tailored care/service

    Wessex Water

    Wessex Water

    Wessex Water

    United to Perceptive

    Flexible Empowered Skilled

    Confident

    Go the extra mile

- always meet the needs of customers who are finding life more difficult
- give no-quibble compensation if things do go wrong
- increase help for households to use less water
- reduce leakage by 15% so that the total amount of water we take from the environment will reduce despite a growing population
- fix the vast majority of reported leaks in a day.

In 2021, we introduced our new customer feedback strategy, allowing us to gather a greater number of views on our service, rapidly spot any dissatisfied customers and ensure continuous improvement. Of our customers 94% were satisfied with our service, with 87% giving us a five star rating on Trustpilot.

Our skilled staff are the most important resource we have to deliver this. We need to retain a dedicated, resilient, customer-focused service, and we know that an engaged workforce increases customer satisfaction.

#### The extra mile

When it comes to customer service it's often the little things that make a difference. We only have one opportunity to get it right. GEM – going the extra mile – sums up our approach to customer service and putting 'customers at the heart'. We encourage staff to put themselves in the customer's shoes and give them the confidence to achieve the best outcome for that customer.





### Innovative technology for asset improvement

Our extensive sewerage system requires continuous maintenance and investment so that it is fit for purpose. Conventional methods for working on sewers can be very disruptive and have a large carbon footprint, especially when roads, pavement and land are being dug up to repair or replace sections of sewer pipe.

Because of this, we favour 'trenchless' methods of pipe repair, for example by relining existing sewers in situ using cured in place pipeline (CIPP).

We have the only bespoke cured in-place pipeline (CIPP) rehabilitation team amongst the water and sewerage companies and take a lead on advising others on standards and techniques.

The CIPP team is internationally recognised for excellence and won the International Society of Trenchless Technologies World Innovation award in Rome 2007 and Toronto 2009. More recently, the team instigated the first styrene protocol on behalf of WaterUK and won the sector award from ROSPA in 2017.

Maintaining a dedicated CIPP team has delivered the following benefits:

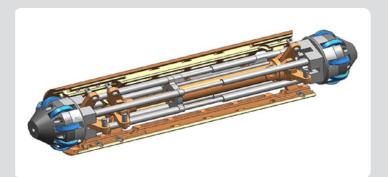
- £8-10m is saved annually by avoiding open-cut techniques (individual schemes have seen savings of more than £2m)
- 95% reduction in carbon footprint compared to open-cut avoiding 230,000 tonnes of exported muck and imported bedding per year (equivalent of 20,000 fewer lorry movements on our roads).

Furthermore, the dedicated team has fostered an attitude of research and development which has led to the following innovations.

**The MAC extensometer:** for non-destructive testing of tunnel linings in order to establish structural capacity and longevity. The system is undertaken in conjunction with geological investigations and sample crushing of tunnel lining cores to help us analyse the condition of the tunnel and its ability to withstand external forces.

**CIPP lining for rising mains:** Sewers can become deformed from external stresses, sometimes leading to a complete collapse. A pipe that has deformed substantially needs to have its circular profile restored before a new, permanent liner can be inserted. However, there were no known devices worldwide that could do this. So, the team designed and developed its own re-rounding robot and a lining system taking inspiration from stents used in cardiac surgery, bringing significant efficiency to repair tasks of this kind. replacing the pipe, which would have been significantly more expensive.

**Re-rounding robotics:** sewers beyond 10% deformation require re-rounding prior to lining. As there were no known devices worldwide that could restore a pipe's circularity where it had substantially deformed for long enough to enable a permanent liner to be inserted and cured, the team designed and developed its own re-rounding and temporary lining robot, bringing significant efficiency.







### Protecting the water environment through advanced data analysis

Reducing river pollution from sewer storm overflows is one aspect of environmental protection and a key target for water and sewerage companies.

Storm overflows are designed so that when a sewer has filled up with rainwater or groundwater, highly diluted sewage will discharge from the overflow. However, serious pollution can occur when undiluted sewage spills out of a storm overflow during dry weather, due to a problem further down the sewer such as a blockage.

In recent years we have installed many event duration monitors (EDMs) at storm overflows. These devices tell us the level of sewage in the pipe, trigger an alarm when they are discharging, and measure the duration of the overflow. The proliferation of EDMs has led to a large increase in alarm data from our sewerage network, and we have found that alarms triggered by a significant problem (such as a dry weather spill) can be obscured by an expected spill happening during wet weather.

So, we wanted to be able to use the new alarm data more intelligently. How could we know which alarms are from sewers with flow depths beyond what is expected, given the weather conditions at the time? In other words, which alarms are indicating a genuine problem? Also, could we use EDM data to give early warnings of blockages, enabling us to act early to prevent pollution incidents from occurring?

### **Wessex Water Marketplace**

To help us answer these questions we used Wessex Water Marketplace – our outward-facing platform for business challenges, which helps us reach a wide range of suppliers and solution providers, and share our data where appropriate. This is particularly valuable when our own understanding of an issue in the early stages.

We were aware of a number of smart algorithm products that might work, but there was limited real-world implementation



in the UK. A Marketplace challenge offered the chance to reach a large audience and test a range of options using real data, to understand which was the best fit for us.

We launched the challenge in autumn 2019, inviting interested parties to process our data in their systems to demonstrate their abilities. Sixteen companies took up the challenge, and we selected three to proceed to the next stage: a live proof of concept trial in the Bath sewerage catchment during summer 2020.

Following the trial and the subsequent tender process, we selected StormHarvester who use hyperlocal rainfall forecasting to accurately predict flooding events at wastewater assets such as pipes, pumps and combined sewer overflows, up to six hours ahead. Their advanced data analysis methods can be seen as a specific type of artificial intelligence.

StormHarvester will support us up to 2025 by monitoring up to 1,700 devices across our network, in what will be the most extensive use of Al in any wastewater network in the world. This will help us manage our sewer network in a more proactive way, reducing the likelihood and impact of pollution as a result.

