

Sustainable Finance Allocation and Impact Report

March 2024



Wessex Water
YTL GROUP



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Glossary

DWI	The Drinking Water Inspectorate (DWI) provides independent reassurance that water supplies in England and Wales are safe and drinking water quality is acceptable to consumers
CRI	The Compliance Risk Index (CRI) is a measure designed to illustrate the risk arising from treated water compliance failures.
PC	Performance commitments
KtCO ₂ e	kilotonnes carbon dioxide equivalent
AMP	Asset management plan for a defined time period
BAP	Biodiversity Action Plan
SSSI	Sites of Special Scientific Interest
NNR	National Nature Reserves
OFWAT	The Water Services Regulation Authority (Ofwat) is a non-ministerial government department that is the economic regulator for the water and sewerage sectors in England and Wales.
UKCSI	UK Customer Satisfaction Index
ESG	Environmental, Social, and Governance
ICMA	International Capital Market Association
WTC	Water treatment centre
WINEP	Water Industry National Environmental Programme
EA	Environment Agency
FFT	Flow to full treatment
DWP	Department for Work and Pensions
BC	Bioresources centre
WWF	Wessex Water Foundation

Foreword

I am delighted to introduce Wessex Water's inaugural Impact Report.

In March 2023, we issued our first £300m sustainable bond. This was well received by the market and underlined our commitment to the environmental and the social benefits we deliver as a company.

This report highlights the impact that Wessex Water's business activities and investments have on the environment and communities we serve. It demonstrates our contribution to the region and how we are guided by our purpose: *through water we support our customers' health and wellbeing and enhance the environment and the diverse communities we serve.*

These are challenging times for the water sector. The need for environmental performance and resilience is increasing, whilst cost-of-living pressures emphasise the requirement to avoid our bills adding an unnecessary burden on our customers' household budgets.

Global warming is associated with more extreme weather and, in the UK, will lead to drier summers and wetter winters. It is critical for us to provide resilient water and wastewater services throughout these changes.

We understand the increased scrutiny of our actions, and this report highlights the steps we have already taken and the ones we intend to take to improve our environmental and social footprint across the region we serve.

Our actions support our belief that water should always be affordable for all customers, and nobody should have their water use rationed by their ability to pay. We are targeting zero water poverty, based on the government's definition of no-one spending more than 5% of their disposable income on our services.

Over the last 20 years YTL's sole ownership of Wessex Water has provided a strong foundation for us to meet these challenges. We have proposed a significant increase in investment during 2025-30. This underpins our ability to improve river health, deliver further environmental improvements, respond to the growing impact of climate change, reduce our carbon footprint, and deliver our customers' other priorities.

Wessex Water will be more frequent visitors to the capital markets. We aim to present to investors our positive impact on the environment and society with the detail and transparency needed to continue to be a trusted, financially strong company with fair investor returns.

I welcome your thoughts and feedback to help us develop our future reports.



Andy Pymer
Chief Finance Officer



Andy Pymer – Chief Finance Officer

About Wessex Water

Wessex Water is the regional water and sewage treatment business serving a 10,000 square kilometre area of the south west of England, including Dorset, Somerset, Bristol, most of Wiltshire and parts of Gloucestershire and Hampshire. The company is a wholly owned subsidiary of YTL Power International of Malaysia.

Through our service we support our customers' health and wellbeing, and enhance the environment and the diverse communities we serve. We aim to:

1. **Provide reliable, affordable services for all customers and communities.**
2. **Deliver a better environment for nature and people.**
3. **Be a great place to work.**
4. **Be a trusted, financially strong company.**

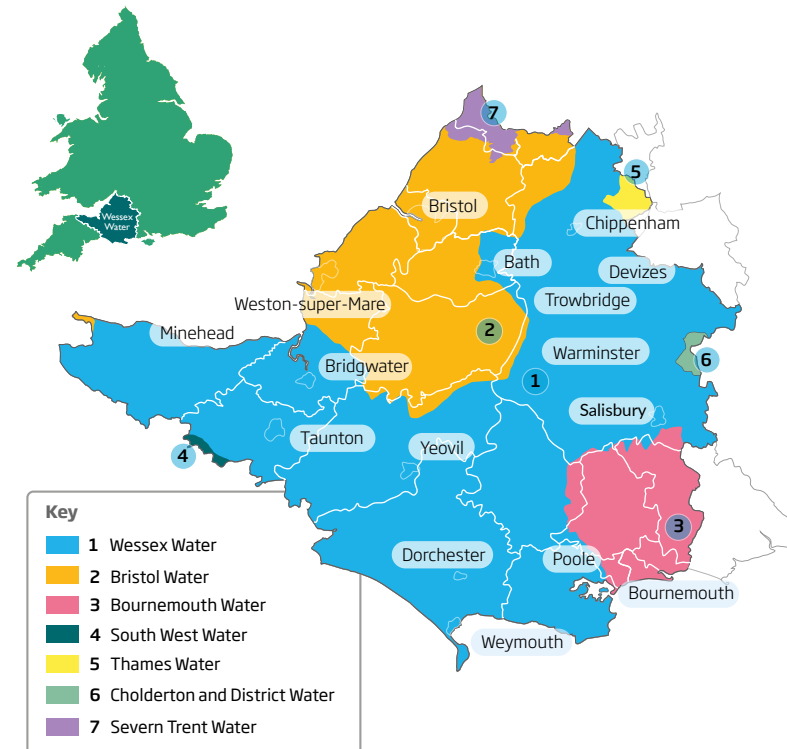
Wessex Water is one of the leading water and sewerage companies for customer service and satisfaction, as judged by standards set by our regulators. We are committed to delivering the highest levels of customer service and environmental performance at a price that customers can afford.

We treat and supply	We take away and treat
Over 278m litres of water per day to 1.4m people and over 47,000 businesses	898m litres of wastewater/day from 2.9m people and over 62,000 businesses
We have	We have
<ul style="list-style-type: none"> 253 water sources and treatment centres 74% groundwater sources, 26% reservoirs or riversources 311 service reservoirs and water towers 12,116 km of water mains 	<ul style="list-style-type: none"> 35,089km of sewers 2,159 pumping stations 398 water recycling centres

We continually seek innovative ways of working, delivering a high quality service and experience for our customers. We provide training, development and opportunities for our staff and work collaboratively with our stakeholders.

We are a long-term business that is committed to reducing our environmental impact. This includes our support for the government's net zero by 2050 target; and our own commitment to achieve net zero operational emissions by 2030 and net zero total emissions by 2040.

Alongside mitigation, we recognise the importance of preparing for climate change and having a business that is resilient to potential impacts. Adapting to a changing climate is integral both to our long-term vision and our business plan, and to subject-specific exercises such as our water resources planning process.



Our values

Ethical: We are honest and ethical in the way we conduct our business.

Respect: We treat our customers, the wider community, the environment, and one another with respect.

Value: We value everybody's contribution and ensure the health, safety and welfare of all our colleagues.

Long-term: We are a long-term business, we plan, innovate, and invest for future resilience.

Our mission

Customers: To provide reliable, affordable services for all customers and communities.

Environment: To deliver a better environment for nature and people.

Employees: To be a great place to work for all.

Investors: To be a trusted, financially strong company with fair investor returns.

Our purpose

Through water we support our customers' health and wellbeing and enhance the environment and the diverse communities we serve.



"We are proud that our aims have remained the same since 1988 and that, over the last 30 years, we have evolved what they mean and how we deliver them."

Colin Skellett, Chief Executive

Outcome	Aim
Safe and reliable water supply	100% quality compliance always Zero interruptions of longer than three hours
An effective sewerage system	Halve the impact of sewer flooding
Affordable bills	Zero water poverty
Excellent customer experience	Be a top 10 customer service provider in the UK
Sustainable abstraction	Never harm the health of the water environment through our abstraction
Excellent river and coastal water quality	To restore the quality of our rivers and coastal waters
Net zero carbon ¹	Be a net zero carbon ¹ business by 2040
Increased biodiversity	Double our contribution to the region's biodiversity

Empowering our people:

- **Culture, inclusion and diversity:** we will have an inclusive workforce that reflects the cultures and diversity of the region we serve.
- **Individual safety, wellbeing and engagement:** our colleagues will be safe at work, proud to work for us and fully engaged in their roles.
- **Skills, knowledge and opportunity:** our colleagues will have all the skills and knowledge they need to confidently carry out their roles.

Financing the future:

- **Market-led outcomes:** we will harness the power of markets to drive the most efficient solutions.
- **Resilient financial stewardship:** we will demonstrate long-term financial stability.
- **Well managed, open, ethical and transparent:** we will prove that we are honest and ethical in the way we conduct our business.

¹ Net zero carbon will include the embodied carbon associated with construction materials, treatment chemicals and other products that we consume (scope 3)

Performance 2022-2023

Performance statistics

Sustainable water and wastewater management

4:10 (mm:ss) water supply interruptions

1.04 compliance risk index score

Terrestrial and aquatic biodiversity conservation

Approximately 41% of our land is being managed for biodiversity

Our assessment indicates that our landholding was valued at 14,348 biodiversity units (BU)

Environmentally sustainable management of living natural resources and land use

Approximately 75% of the water we supply to our customers comes from boreholes and springs and we look after many important chalk streams, ensuring flows support the flora and fauna that live there

87% of designated bathing waters in our region are at 'Excellent' or 'Good' status for 2022 season

Pollution prevention and control

496 sewer flooding impact score

3.7 tonnes of nitrogen prevented from entering rivers and coastal waters per day

Clean transportation

Six HGVs running on Bio-CNG (compressed natural gas)

Our company car fleet comprises of 123 petrol hybrid vehicles and 11 electric vehicles

Access to essential services and affordable basic infrastructure

93rd in the UK Customer Satisfaction Index

6.5% of customers are spending more than 5% of their disposable income on their water bill

Climate change adaptation

No hosepipe ban / maintaining our 47-year unbroken record of no restrictions

0% risk of severe restrictions in a drought

Renewable energy

12% of our electricity demand came from renewable electricity generated at our sites.

Energy efficiency

The biomethane that we exported to the gas grid was 2.5 times the natural gas that we consumed ourselves.

Socioeconomic advancement and empowerment

In 2022 we completed the installation of 24 new drinking water refill units across the region. The units are well used, providing free water to thirsty people and preventing more than 245,000 single-use plastic bottles going to landfill every year

We were also able to provide free drinking water at local sporting events again. We provided water stations at runs across our region, including Cancer Research UK's Race for Life and the Bath Half Marathon, hydrating more than 16,000 athletes, and eliminating more than 20,000 single-use plastic bottles from landfill

Eco-efficient and/or circular economy adapted products, production techniques and processes

99.9% of waste diverted from landfill

158,669 total tonnes of waste removed

Our Annual Performance Report 2022-23 shows more metrics on our performance against the business plan.

Recent progress

Our changing climate affects all aspects of the Wessex Water business. The last year saw unprecedented droughts across large parts of Europe, including the worst drought in the UK since 1976.

However our investment over several years in developing a regional water supply grid, together with the leakage reduction work on our 12,116 kilometres of pipes, meant that we had no need to seek any restrictions on the use of water across our region.

The high quality of our customer service was again recognised, both in the Ofwat league tables and in our excellent Trustpilot score.

We are also the best rated water and sewerage company in the Institute of Customer Services national league table of companies from all sectors.

Compliance with stringent standards for drinking water, as reported by the Drinking Water Inspectorate (DWI), also showed us as the best performer.

Our financial health has always been, and remains, robust. We maintain stable and prudent gearing, a simple financial structure, and a solid credit rating. We only pay shareholder dividends and executive bonuses when they are warranted by performance and would not harm our financial resilience.

The impact of high levels of inflation has increased the number of customers finding it difficult to pay their bills, so we have widened the affordability support we provide, and made it faster and easier to access. We now have almost 60,000 customers benefiting from our assistance programmes.

Recent challenges

Storm overflows are the legacy of more than 100 years leading up to the mid-20th century. During this time, sewerage systems were built with a single pipe carrying both sewage and rainwater, and overflows that were designed to protect property from flooding during very heavy rain.

We had 1,300 overflows on our 35,089 kilometres of sewers and we have been steadily eliminating or improving these, but not fast enough. We have already increased investment and are

currently spending £3 million per month – at no additional cost to customers – to make a 25% reduction in the operation of storm overflows by 2025, from the 2020 level.

Climate change also means lower flows for longer periods in many of our rivers and watercourses. This, coupled with a growing population and new houses, means that the level of nutrients is too high, resulting in excessive growth of algae and consequent damage to the water environment.

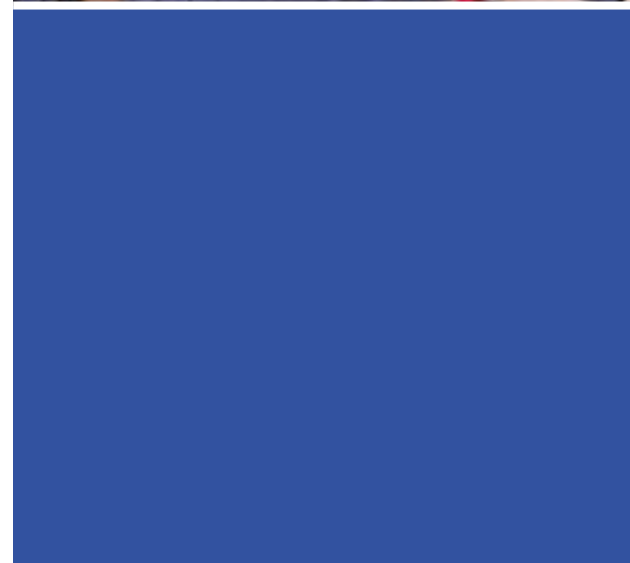
Because of this, Natural England are imposing tough new standards for the level of nutrients and requiring any new development to be nutrient neutral. The new standards will affect almost half our region and will be the largest driver of our investment programme from 2025.

The combination of growing environmental pressures and the cost-of-living crisis require a fresh approach to water and nature regulation. Wessex Water is working with green groups and other national stakeholders to press government for a much more holistic approach to environmental improvement, focused on delivering environmental outcomes at lower cost and with a lower carbon footprint, using catchment-based approaches and nature-based solutions.

Governance and Reporting

Wessex Water primarily reports according to Ofwat's governance objectives, but the Board also follows the Wates Corporate Governance Principles for Large Private Companies (the Wates Principles).

Alongside financial reporting requirements, we provide comprehensive information on progress against our performance commitments in our Annual Performance Report. We may also voluntarily adopt new disclosures - going beyond the requirements of non-listed entities - where we feel it aids the user's understanding of the company and its policies. We published a report using the framework of the Taskforce on Climate Related Financial Disclosures two years before we were required to do so. We anticipate that our reporting will evolve in line with the standards of the International Sustainability Standards Board. At present we are not subject to the EU Corporate Sustainability Reporting Directive.



Excellent customer experience

We are extremely proud of our customer experience record. The high quality of our customer service was again recognised, both in the Ofwat league tables and in our excellent Trustpilot score.

We are also the best rated water and sewerage company in the Institute of Customer Services national league table of companies from all sectors. Compliance with stringent standards for drinking water, as reported by the DWI, also showed us as the best performer.

In 2020, Ofwat introduced its customer measure of experience, C-Mex, and we have been in the top three highest performing companies across the UK water sector with scores of 86.10 in 2020-21 and 84.82 in 2021-22.

Overall we have achieved a consistently high C-Mex score.

C-Mex (score)		
Target 22-23	Actual 22-23	Previous year
Upper Quartile 81.26	82.99	84.82

Further information regarding our performance on Service and satisfaction, communicating with customers, handling complaints and acting on feedback can be found on our Annual Review Summary 22-23 [Annual results documents](#)

Customer comments

Oct 2022

Hi - can I please say a huge thank you to your engineer Matt for coming out on call today to sort out a seized stop cock in the road. Matt was a great bloke, polite and friendly and really helpful. Also want to mention Max in the call centre who took my call. He was also very polite and helpful. Great service Wessex Water!

Nov 2022

Dear Sarah, thank you for your email - and for Wessex Water's excellent service. One of your team members/engineer visited me earlier today and was very helpful. It's good/reassuring to have an expert opinion - and talking with the engineer confirmed my thoughts that the existing cast iron covers could, with a bit of work, be re-used and resealed -and this option would be less disruptive than cutting the clay inspection chamber pipes to fit new plastic frames and covers. I don't know the name of the engineer - but hope you can pass on my appreciation to him for his time and help.

Dec 2022

I just wanted to let you know that Ben did a great job in clearing a blockage for me and my neighbours last night. He was really efficient and polite, we were the last job of the day at about 10pm.

Jan 2023

I wanted to feedback on a visit I had from a WW worker yesterday. If this could be passed on to the relevant person or office please? I reported a blocked drain outside our property on Monday 16th Jan, via the website, and a WW guy arrived promptly the next day. His name was James. He was excellent in every way: knowledgeable, professional, polite, courteous, and friendly. He was quick to assess and resolve the issue - much to my relief. I was really impressed with James and I wanted to inform Wessex Water that he is an absolute credit to your company. Thank you so much for being so good right from the beginning the process - especially at a time when you were so busy with flooding issues in the area. Thanks again. Customer

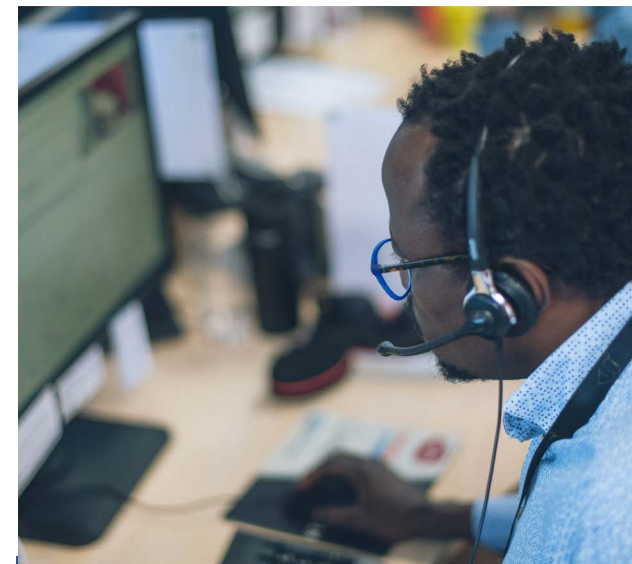
Feb 2023

Thank you for the wonderful prompt service I received today 14/2/23. Phoned at 10.15 job done (blocked sewer) at 12.15. Paul at Glanvilles and Molly at Wessex Water, plus the lady who dealt with my call around 10.00. all were a credit to everyone there. Thanks. Worle WSM

Mar 2023

Toby turned up within an hour after reporting an overflowing public sewage drain that goes through our front garden. The weather was awful, but Toby worked so hard for nearly 90 mins to clear the blockage, a really physical job to get it cleared, and he worked tirelessly to sort the problem. Great service, great communication, thanks for your help.

We are targeting being a top 10 company in the all-sector UK Customer Satisfaction Index (UKCSI) by 2050. We are the top water company in the latest UKCSI survey.



Affordable bills

We continue to offer a range of social tariffs at varying levels of support to ensure that those in need receive the assistance that they require. A breakdown is given on the right.

Although we may have expected the financial impact of Covid and the cost-of-living crisis to increase the take-up of our social tariffs in 2020-21, 2021-22, and 2022-23, this has not been the case. For further commentary, see the Annual Performance Report 2022-23 [Annual results documents](#)

We are still expecting an increase in help required by customers due to the cost-of-living crisis and have put measures in place together with our expert advisers and partners. Only from January to March 2023 did we start to see an increase in customers seeking debt advice and applying for Assist.

Impact metric

Total bill reduction to customers on social tariffs per 10,000 households (£ per 10,000 customers)		
Target 22-23	Actual 22-23	Previous year
74,606	72,723	61,113

We did not meet our target for the value of the bill reduction to customers on social tariffs. This is calculated by assessing the difference between the bill a customer would have paid under standard charges and the bill they actually paid under the social tariff. Performance is linked to the level of inflation and the number of customers on social tariffs – Assist, WaterSure and the discount for low-income pensioners.

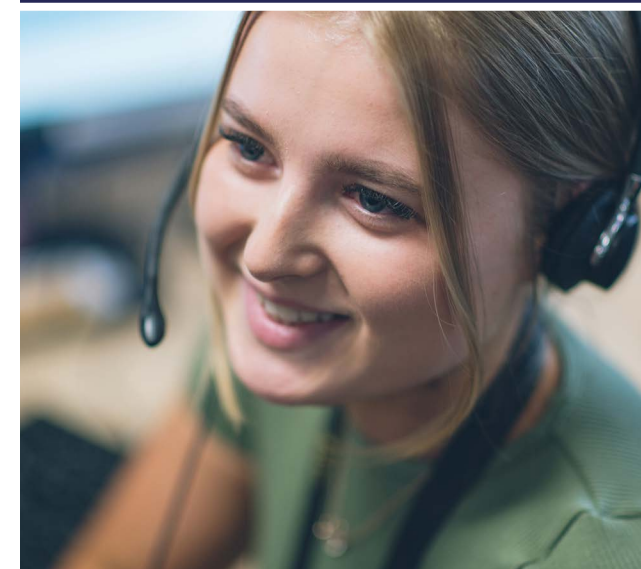
Customer numbers	Unit	Assist	WaterSure	Discount for low-income pensioners	Total
Business plan forecast	Nr	15,613	10,416	43,177	69,206
Actual	Nr	17,479	8,646	23,095	49,221
Variance	Nr	1,866	-1,770	-20,082	-19,985

The number of customers benefiting from our social tariffs increased during 2022-23. More than 18,300 customers received discounts of up to 90% through Assist. However, a scheme to automatically apply the discount for low-income pensioners was implemented later than we anticipated, which affected our performance. We expect to meet our target next year.

Priority Services for customers in vulnerable circumstances: reach (%)		
Target 22-23	Actual 22-23	Previous year
4.9	6.1	4.0

Priority Services for customers in vulnerable circumstances: actual contact (%)		
Target 22-23	Actual 22-23	Previous year
35.0	54.8	55.0

In 2022, we added just under 27,000 customers to our Priority Services Register, meaning 6.1% of households are now signed up. This exceeds our target reach not only for 2023 but also for 2024.



Safe and reliable water supply

Reliable supply

We spent £71.8m across 2021-22 and 2022-23 on safe and reliable water supply, including increasing resilience of water supply and reducing water losses from the system through leakage.

Our changing climate affects all aspects of our business. 2022 saw unprecedented droughts across large parts of Europe, including the worst drought in the UK since 1976.

Our investment over several years in developing a regional water supply grid, together with the leakage reduction work on our 12,116 kilometres of pipes, meant that we had no need to seek any restrictions on the use of water across the Wessex Water region.

Risk of severe restrictions in a drought (%)		
Target 22-23	Actual 22-23	Previous year
0	0	0

We have assessed that 0% of the population would be at risk of severe restrictions in a drought, which is consistent with our target.

Restrictions on water use (hosepipe bans) (number)		
Target 22-23	Actual 22-23	Previous year
0	0	0

The metrics below include the investment at Durleigh, with a case study in the section "Sustainable water and wastewater management" later in this report.

Water supply interruptions (mm:ss per property per year)		
Target 22-23	Actual 22-23	Previous year
05:45	04:10	04:12

We achieved our best ever performance on interruptions to supply, which edged further down to an average of 4 minutes 10 seconds per property from 4 minutes 12 seconds in 2021.

Water quality customer contacts (number per 1,000 population)		
Target 22-23	Actual 22-23	Previous year
1.12	1.14	1.17

Despite the challenges, complaints from customers about the taste, odour or appearance of their water fell for the fourth consecutive year. We received 1,525 contacts from 1.4 million customers, the lowest level ever – down from 1,559 in 2021 and 1,904 in 2020. This translates to a rate of 1.14 contacts per 1,000 customers.

For more information, please see the cases study on our investment at Durleigh water treatment works.



Safe supply

Water quality compliance (CRI) (score)

Target 22-23	Actual 22-23	Previous year
0.00	1.04	0.37

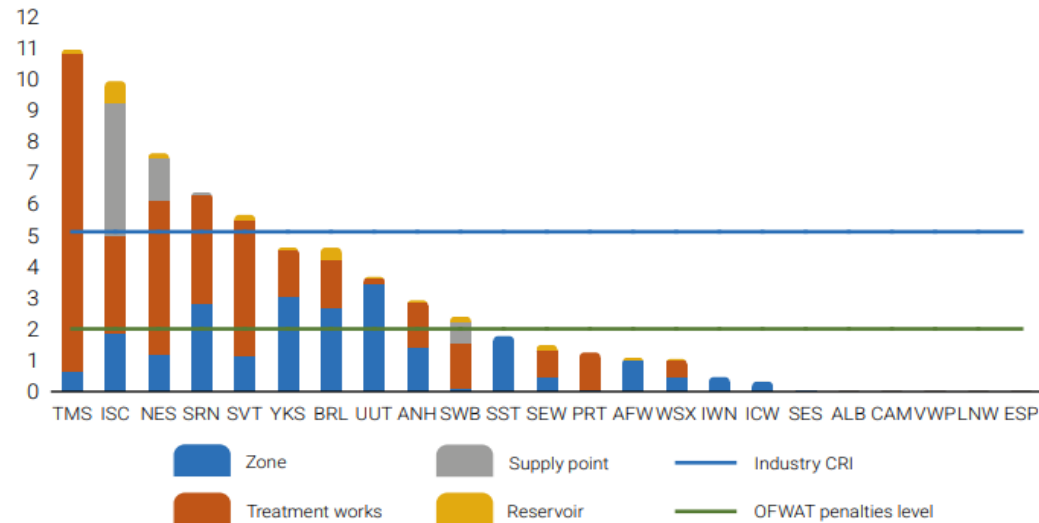
The increase in our score is attributable to the detection of a single coliform at one of our biggest treatment centres.

We ensure we learn from every sample failure, putting in place actions to prevent recurrence, to ensure our CRI remains as low as possible. We expect to remain among the best performing water companies; the provisional industry average score is significantly worse at around five.

The graph below is from the DWI report "Drinking Water 2022 - Public supplies England" [Drinking Water Inspectorate](#)

The graph shows that we (WSX) have the third lowest CRI for water and wastewater companies across England, well below the threshold for OFWAT penalties.

Compliance Risk Index by company England 2022



An effective sewerage system

Internal sewer flooding (incidents per 10,000 sewer connections)

Target 22-23	Actual 22-23	Previous year
1.58	1.31	1.43

As part of our business planning process customers identified the reduction of sewer flooding as a key priority. This is a common PC (performance commitment) across the industry.

Despite periods of extreme wet weather in the latter part of the year, the number of internal sewer flooding incidents have decreased from last year. Flooding as a result of inadequate capacity in our sewers accounted for just 5% of incidents.

As part of our sewer misuse strategy, we will target engagement in new hotspot blockage areas, measuring the impact of the engagement on blockage numbers. In October, our campaign focused on Bridgwater, Yate, Melksham, and Gillingham and included hair catchers, sink strainers, GunkPots, FreshX and face pads.

This was accompanied by a wet wipe campaign. The campaign involved environmental educational officers visiting properties, and several social media posts on Instagram and Facebook.

The incentive is financial, and we earned an outperformance payment of £1.536m as a result.



External sewer floodings (nr/10,000 sewer connections)

Target 22-23	Actual 22-23	Previous year
16.73	17.83	19.27

In 2022-23 there was a 7% decrease in our external flooding rate from the previous year, despite rainfall in the last six months of the year being 130% of the long-term average.

Despite this we missed the in-year target rate and have incurred an underperformance payment of £1.160m.

Risk of sewer flooding in a storm (%)

Target 22-23	Actual 22-23	Previous year
9.45	7.98	9.84

The risk of sewer flooding in a storm measure relates to our understanding of flood risk in our region. We can use this knowledge to develop strategies to reduce the risk of sewer flooding over the long term.

Impact metrics

Sewer collapses (number per 1,000km sewer)

Target 22-23	Actual 22-23	Previous year
6.33	5.22	5.91

We are pleased to have met our target on reducing sewer collapses for the third year in a row. The measure is designed to ensure that the overall asset health of the below-ground wastewater asset is maintained and improved for the benefit of current and future generations.

The percentage of the population at risk is lower than our target. This reflects improvements in our understanding of risk delivered through better model coverage.

Sewer flooding risk (score)

Target 22-23	Actual 22-23	Previous year
50,651	56,258	53,737

We did not achieve our target on the sewer flooding risk measure, which assesses the probability and impact of flooding incidents. Performance was affected by the high levels of rainfall with the wettest March for more than 40 years.

An effective sewerage system

Target 22-23	Actual 22-23	Previous year
0	496	533

There are more metrics in our 2022-23 Annual Report and Accounts.

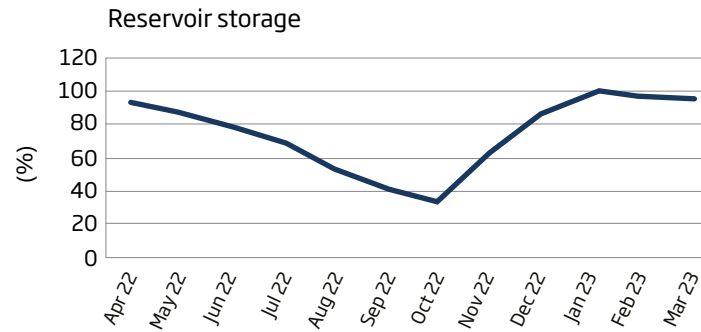
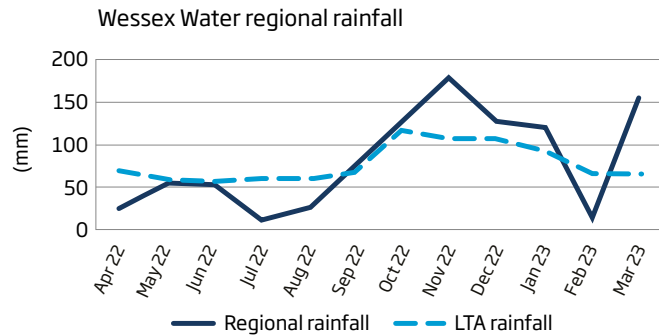


Sustainable abstraction

Abstraction

Sustainable abstraction is one of the eight outcomes that our customers and stakeholders have told us are their priorities.

The unprecedented heat of 2022, combined with the with the driest January to September period since 1976 in our region, made for the most challenging conditions we have faced since 1976. Demand soared as reservoir and groundwater levels plummeted and drought followed.



The graph above shows rainfall across our region compared to the LTA (LTA = longer term average (1981-2010)).

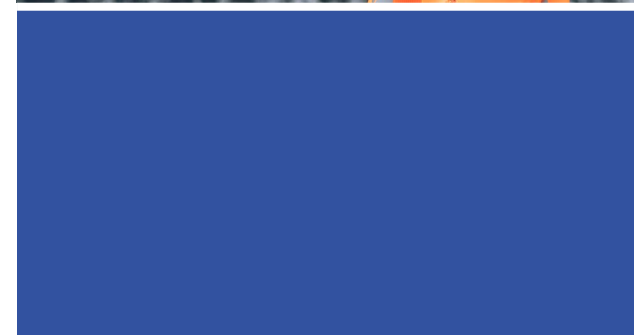
Our total reservoir storage decreased significantly due to unseasonably low rainfall and very dry weather in the summer.

We coped successfully with these extreme conditions, maintaining supplies to all customers, avoiding any usage restrictions, and maintaining flow support to several vulnerable streams and rivers. Our performance on sustainable abstraction improved on the previous year to 98%.

Sustainable abstraction	Target 2050	Actual 22-23	Previous year
Compliance with abstraction licences	100%	98%	97%

Despite the challenging dry weather in summer 2022, we continued to meet our performance commitments on the four metrics outlined in our 22-23 Annual Review Summary [Annual results documents](#).

Our [Strategic Direction Statement](#) provides more information on sustainable abstraction. It contains a case study: Long-term water supply planning, that shows an example of the outcome we aim to achieve.



Leakage

There are several benefits from maintaining a healthy water surplus by reducing leakage across our network:

- less water is abstracted from the environment
- lower carbon emissions from using less energy to treat and move clean water around our network
- reduction in the risk of customers not having clean water.

The leakage reduction work on our 12,116 kilometres of pipes, has contributed to us not needing to seek any restrictions on the use of water across our region.

The risk of leakage increases as the ground around pipes dries.

Our 2022-23 Annual Review Summary Annual results documents [Annual results documents](#) shows our performance on achieving the three-year average leakage target, meeting our customer reported leaks fixed within a day and performance on mains repairs.

Our direct leakage management costs have increased from £94m in AMP6 (2015-20) to a forecast £105m in AMP7 (2021-25). These figures have been adjusted for inflation. We anticipate further significant increases in AMP8.

The table below shows our performance on leakage from the start of AMP7.

Year	Performance (three-year average)	
	Actual	Commitment
	% Reduction from baseline	
20-21	5.2%	1.6%
21-22	10.8%	3.9%
22-23	9.3%	6.9%

The leakage performance commitment level is measured as a three-year average reduction from a baseline set in 2019-20.

Almost half of the water companies in England and Wales achieved their leakage performance commitment levels in 2022-23. However, companies reported a challenging year with most seeing an increase in leakage compared to 2021-22.

This means that the sector will need to deliver consistent, sustained reductions in the next two years to achieve the 2024-25 performance commitment levels.

Our Climate Change Adaptation Report 2021 explains further our historical progress on tackling leakage and current progress on the way to meeting our target to reduce leakage by a further 15% by 2025. See [Climate Change Adaptation Report](#)

Conversely, awareness of the drought stimulated customers to engage with our water saving messages, lowering average per capita consumption across the year to pre-Covid levels. We beat our performance commitment target for the volume of water saved through water efficiency activities.



Excellent river and coastal water quality

River and coastal water quality is among the eight priority outcomes of our customers and stakeholders.

There has been unprecedented criticism from the public, media, and politicians about the state of rivers and the impact of storm overflows has challenged us to fundamentally re-assess our investment programme and priorities.


We fully understand public concerns about river health and storm overflows, and we are committed to doing more, faster, and transparently reporting progress.

Climate change will cause drier summers, which will lead to low flows for longer periods in many rivers and watercourses. This, coupled with a growing population and new houses could lead to higher concentrations of nutrients, increasing the risk of excessive growth of algae and consequent damage to the water environment.

Because of this, Natural England are imposing tough new standards for the level of nutrients and requiring any new housing development in some areas to be nutrient neutral. The new housing standards will affect almost half our region and will be the largest driver of our investment programme from 2025.

An example of investment to reduce nutrients in rivers is included later in this report.


Our 2022-23 Annual Review Summary [Annual results documents](#) gives further information on our performance on pollution incidents, storm overflows, planning for the future, discharge compliance and water quality.



Near real-time water quality information for wild swimmers

Wild swimmers at Warleigh Weir near Bath are now benefiting from our **pioneering water quality app**.

The app applies artificial intelligence to water sampling data to make accurate predictions about bacteria levels in the River Avon, so swimmers have better information about the risks before they enter the water.



It also provides useful information about water temperature, water flow and rainfall. The app is live and proving very successful and we are now rolling the technology out to other locations.

To promote recreational use of rivers for wild swimming an app was created in partnership with leading artificial intelligence provider UnifAI Technology. A UK-first webapp was launched in spring 2022 that provides half-hourly predictions on the water quality and temperature at Warleigh Weir. For more information on the near real time app click [here](#)



Our expenditure to improve river health and coastal water quality is linked to the following metrics.

Length of river with improved water quality through WINEP delivery (km)		
Target 22-23	Actual 22-23	Previous year
167.4	157.8	149.8

Although we delivered our WINEP obligations for this 2022-23, we did not meet our target for the cumulative length of river with improved water quality. This relates to one project, for which we have agreed an extended date with the Environment Agency. This change is not reflected in the target agreed with Ofwat, which relates to the WINEP as of 31 March 2019. As this project will be delivered in 2023-24, we expect to meet or exceed our target next year.

Km of river improved (non-WINEP delivery) (km)		
Target 22-23	Actual 22-23	Previous year
0	32.4	29.9

We exceeded our target in this measure, which relates to removal of nutrients (nitrogen and phosphorus).

Working with communities to improve bathing water experience (number of beaches)		
Target 22-23	Actual 22-23	Previous year
33	36	24

Under this measure we are incentivised to work with local communities and stakeholders to improve the amenity value of beaches with bathing waters.

We made improvements at 36 beaches, exceeding the target of 33.



Increased biodiversity

In 1998, we became the first water company to publish a Biodiversity Action Plan (BAP) targeting efforts to conserve and enhance wildlife across our region. Our BAP remains our overarching strategy for conserving, enhancing, and working with the natural environment throughout our business.

The latest version of the BAP published in spring 2023 outlines our duties, commitments, and targets in fulfilling our aims of conserving and enhancing biodiversity across our region, and the actions we will be taking to achieve them.

We are fortunate to live and work in a region renowned for its wildlife and habitats. To the west we have the wetlands of the Somerset Levels, to the east the chalk grasslands of Salisbury Plain and its associated chalk rivers, to the south Dorset's precious heathlands and to the north the limestone grasslands and wooded valleys of the Cotswolds. At the heart of many of these areas are the rivers which flow through our region and the freshwater habitats and species they sustain.

Our region contains:

- more than 470 Sites of Special Scientific Interest (SSSI)
- 35 Special Areas of Conservation
- 11 Special Protection Areas
- 27 National Nature Reserves (NNR)
- more than 6,200 areas designated as Local Wildlife Sites or Regionally Important Geological Sites
- eight Areas of Outstanding Natural Beauty (covering over 30% of our region) and two National Parks.

Our BAP encompasses a range of actions for increasing biodiversity, including:

- management of our land
- operational activities and development
- supporting external biodiversity partnerships and projects
- enhancing biodiversity across our catchments
- increasing use of nature-based solutions
- increasing tree planting.

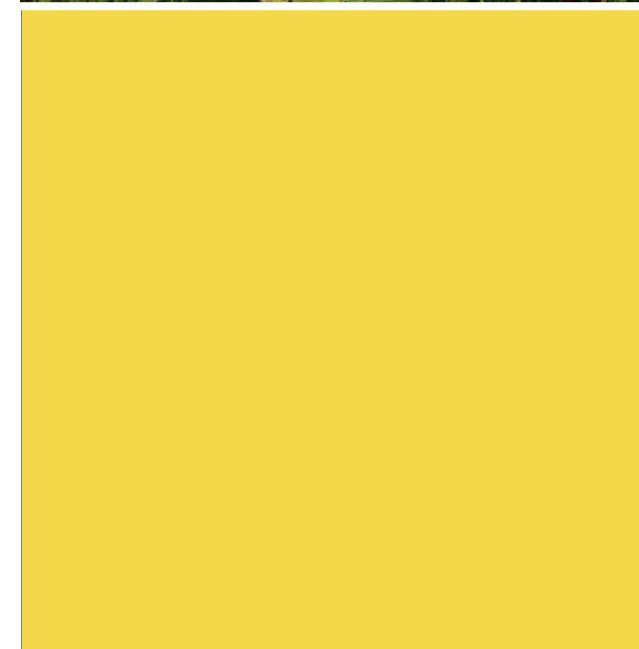
Find out more about our [Biodiversity Action Plan](#).

Impact metrics

Working with catchment partners to improve natural capital (number of projects)		
Target 22-23	Actual 22-23	Previous year
37	43	42

We have exceeded our target on this measure, which includes work with farmers and biodiversity partners to deliver improvement projects for the environment. In 2022-23, we continued to draw on insights derived from the baseline biodiversity value assessment we conducted in 2021. This used Defra's Biodiversity Metric 3.0 and valued our landholding at 14,348 biodiversity units.

Natural capital: improve Sites of Special Scientific Interest (SSSI sites) (%)		
Target 22-23	Actual 22-23	Previous year
60	67	52



Net zero carbon

Our ambition

By 2030, we aim to achieve net zero operational carbon emissions. This target includes our annual emissions linked to energy use and transport, plus other greenhouse gases that are emitted from sewage and sludge treatment processes. However, our goal does not end there.

We know we must also address embodied carbon, i.e. the emissions associated with the materials, products, and services that we use. Therefore, we also aim to achieve net zero total carbon emissions by 2040 at the latest. This will be 10 years ahead of the UK's commitment to achieve net zero carbon emissions by 2050.

We published our route map to net zero carbon emissions in 2021, and recently set out proposals for 2025-30 in our 2024 business plan submission.

The scope of our commitments

Our 2030 net zero operation emissions commitment covers our regulated activities for water treatment and distribution, sewage and sludge treatment, and includes emissions categorised into three 'scopes', as per greenhouse gas reporting standards. The commitment includes:

Scope 1	Emissions from on-site use of fossil fuels; transport; and wastewater and sludge treatment processes.
Scope 2	Emissions from grid electricity, using market-based reporting.
Scope 3	Selected emissions, ie, those associated with grid electricity transmission and distribution; contractors' work on our behalf; public transport and private vehicles used on company business.

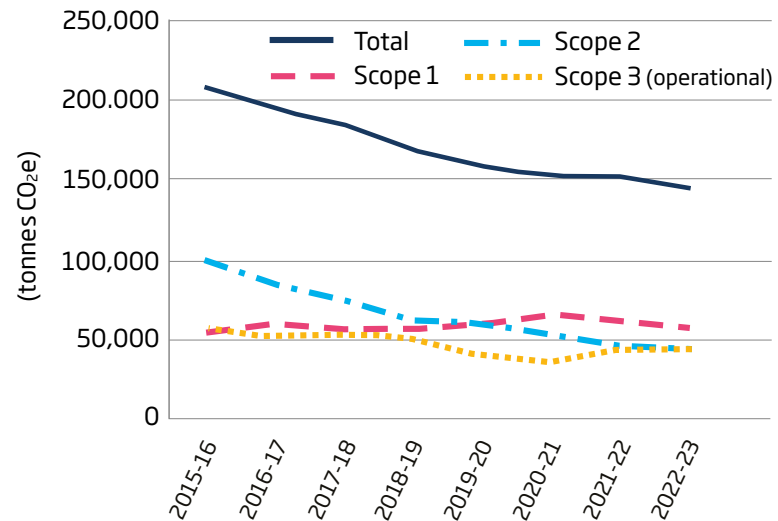
Our 2040 commitment includes the above, plus a wider range of supply chain and downstream emissions, including:

- a. well-to-tank emissions linked to energy use
- b. emissions from the export and use of treated sewage sludge (bioresources)
- c. emissions related to the manufacture and delivery of goods and consumables that we use including chemicals, vehicles, and IT equipment
- d. emissions related to our capital programme (eg, materials, transport, construction).

As of the 2022-23, our annual regulatory accounting incorporated items a and b plus emissions from chemical use in our scope 3 operational emissions report.

The graph below shows the emissions trend for the last eight years. In 2022-23 we also published our first assessment of annual capital carbon emissions; we estimated 48 kilotonnes CO₂e associated with capital projects, and a further 15 kilotonnes CO₂e associated with management and general schemes and other purchased goods and services.

Gross operational emissions (tonnes CO₂e), with the expanded inventory for regulatory reporting



Main challenges

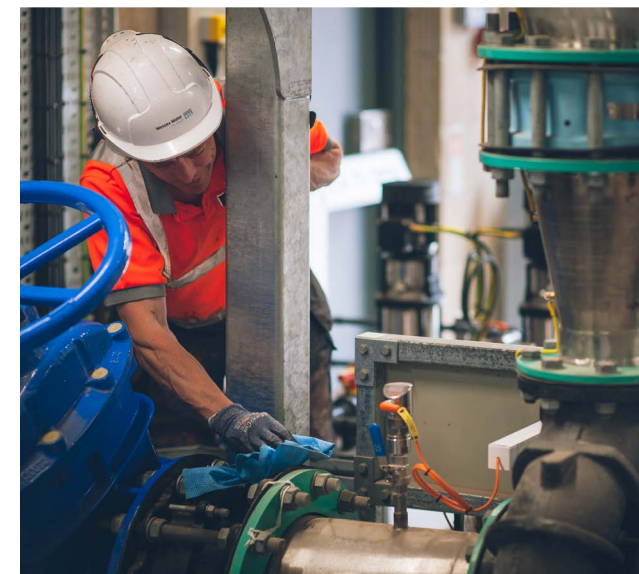
While there are clear options for decarbonising energy and transport, two aspects of our emissions pose greater challenges.

Firstly, the emissions of methane and nitrous oxide from sewage and sludge treatment are likely to be more significant than previously estimated, and the science and technology for quantifying and managing these are in their infancy. Good progress has been made globally in recent years to address this issue, but it will be a risk area for the foreseeable future.

Secondly, our estimate of the capital carbon emissions linked to our forthcoming AMP8 investment programme is significant at 762 kilotonnes CO₂e, including schemes starting before 2025 or continuing past 2030. While supply chain impacts should decrease as the wider economy decarbonises, this could be a relatively slow process in sectors providing a lot of the materials we use such as cement, steel, and plastics.

Consequently, we are developing a whole-life total carbon viewpoint and are working on building whole life carbon assessments into our decision-making processes.

	22/23 emissions		21/22 emissions		20/21 emissions		Baseline emissions 2019/20	
	ktCO ₂ e	% of gross emission	ktCO ₂ e	% of gross emission	ktCO ₂ e	% of gross emissions	ktCO ₂ e	% of gross emission
Scope 1 - Direct emissions								
Burning fossil fuels on site	13.1	9%	13.9	9.7%	16.5	11.3%	12.5	8.7%
Methane and nitrous oxide from sewage and sludge treatment	33.6	23.2%	34.7	24.1%	36.0	24.6%	36.2	25.2%
Transport - company vehicles	11.1	7.6%	11.4	7.9%	11.5	7.8%	11.4	8.0%
Total scope 1	57.1		60.0		64.0		60.2	
Scope 2 - Grid electricity generation emissions								
Grid electricity generation emissions	44.1	30.4%	42.3	29.4%	43.2	29.5%	44.9	31.3%
Total scope 2	44.1		42.3		43.2		44.9	
Scope 3 - Other indirect emissions								
Grid electricity transmission and distribution	5.0	4.3%	0.0	0.0%	0.6	0.5%	15.5	12.4%
Outsourced activities	3.6	3.1%	2.4	2.2%	5.9	5.1%	7.4	5.9%
Public transport and private vehicles	1.3	1.1%	4.5	4.0%	4.1	3.5%	0.8	0.6%
Fuels - WTT	5.9	4.0%	5.7	4.0%	5.9	4.0%	5.4	3.8%
Chemicals	5.1	3.5%	6.2	4.3%	7.5	5.1%	3.2	2.2%
Sludge to land	8.4	5.8%	8.1	5.6%	7.9	5.4%	9.0	6.3%
Total scope 3	43.1		41.7		39.3		38.5	
Gross emissions	144.9		44.0		146.4		143.6	



Adapting to climate change

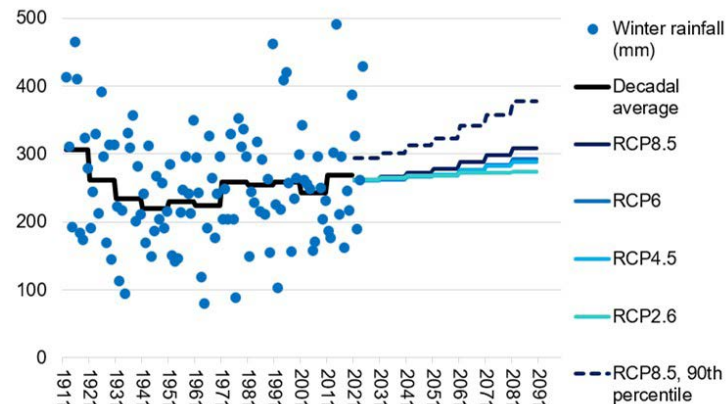
We are already seeing the impacts of climate change on our day-to-day operations, which are affected profoundly by weather. Climate change will have a major bearing on our work throughout the 21st century.

The warming trend since the end of the 19th century has been unequivocal.

Climate change is also affecting rainfall, as evidenced by daily and monthly rainfall data. This allows us to compare current weather with long-term averages, and provide context for the projected effects of climate change. We are seeing wetter winters, and an increasing share of total annual rainfall occurring on days with very heavy rainfall.

Within these long-term trends is significant variation from one year to the next, and while changes to averages are important the resilience of our services is affected more by extreme weather events.

The graph below illustrates this for the winter season. It shows the variation of intensity in historical UK annual winter rainfall. It also shows the projected increases to average winter rainfall for a range of emissions related scenarios (RCPs).



Climate impacts have a bearing on many of the core services that we provide - it will affect water availability, water quality, and the efficacy of sewerage and surface water management, among other things. Heatwaves and drought have clear impacts on water supply and demand, while prolonged or intense rainfall affects the quality of water sources and the capacity of our wastewater network. Adapting to a changing climate is integral therefore to our long-term strategic direction, five-year business plans, and subject-specific exercises such as water resources planning. Our climate change adaptation report sets out overall strategy and our programme of work in the short and long term, in relation to our main physical climate risks.

We prioritise investment or other action to address risk of any nature according to the likelihood and consequence of the hazard occurring. Further information is provided in our 22-23 Annual Report & Accounts [Annual results documents](#)

For climate-related risks, our thinking is also informed by the UK Climate Projections, the UK Climate Risk Assessment, the findings of the IPCC and the National Adaptation Plan. We also use an inventory of UK water sector-specific climate hazards for our wider climate risk assessments.

We use UK Climate Projection 2018 outcomes to inform the 25-year long-term delivery strategies (Water Resources Management Plan and the Drainage and Wastewater Management Plan) as part of the 2024 price review and provide the context for the proposed investment during an initial period of 2025-30. The strategies refer to common reference scenarios for climate change, technology, demand, and abstraction reductions with a benign (RCP2.6) and adverse (RCP 8.5) version of each, analogous to the atmospheric concentration of greenhouse gases that would result from low and high emissions globally.

In our annual report and accounts we provide further details on climate change risks and our adaptation measures aligned to the Taskforce for Climate Related Financial Disclosures.



Sustainable finance programme

Our Sustainable Finance Instruments will be reported in line with our Sustainable Finance Framework (the Framework) that aligns with the company's purpose and business plan commitments and financing ambitions using targeted financing. For more information on our Framework please follow this link [Sustainable finance framework](#)

Wessex Water Services Ltd has its first ESG public rating from Sustainalytics, of 16.8 (low risk). The low-risk rating supports our strong ESG credentials within the UK utilities industry and the wider global environment and our commitment to highlight risks and increase transparency.

Sustainable performance

Benefiting from long-term stable ownership for the last 20 years we operate under a simple and transparent financial structure. Our operational performance has resulted in Wessex Water being considered a leading company at a time when the industry is under constant scrutiny. We are consistently a top performer in delivering our regulator's performance commitments, environmental standards, and customer service.

Our sustainable finance framework

The Wessex Water Sustainable Finance Framework, first published in September 2022, supports the financing of eligible projects that demonstrate our investment to provide and social and environmental benefit within the region that we serve.

Our September 2022 Framework aligns with the ICMA Green Bond Principles 2021, the Social Bond Principles 2021 and the Sustainability Bond Guidelines 2021, as published by the International Capital Market Association (ICMA).

It also aligns with the Loan Market Association's (LMA) Green and Social Loan Principles 2021. It allows for both social and green projects and recognises that some social projects may also have environmental co-benefits, while certain green projects may have social co-benefits.

We are in the process of updating our Sustainable Finance Framework to reflect changes and enhancements to align with current market standards. This will ensure our framework remains current and that we are well positioned to evolve with future market developments. Once this workstream is complete, we will publish the updated framework on our website.

Our totex (capital and opex) programme aligns well with the UN SDG's and ICMA categories. Based on this we can select spend and projects that align with our own environmental and social project categories – see overleaf.



ICMA category	Wessex Water Outcomes	Wessex Water's definition
Sustainable water and wastewater management	Safe and reliable water supply	Expenditure on the water supply network to improve the quality and resilience of drinking water supply and reduce leakage from our system.
	An effective sewerage system	Expenditure on the wastewater network that increases the resilience for waste removal and accommodates future demand across the region.
Terrestrial and aquatic biodiversity conservation	Excellent river and coastal water quality	Expenditure at our water recycling centres (WRC) that meets WINEP requirements by removing more phosphorus and nitrogen from our final effluent.
	Sustainable abstraction	Expenditure to improve biodiversity and strengthen ecosystems.
Environmentally sustainable management of living natural resources and land use	Increased biodiversity	Catchment management programmes that promote farming practices that reduce fertiliser and pesticide use. Preservation or restoration of wildlife habitats on our landholding or through work with other organisations.
Pollution prevention and control	Excellent river and coastal water quality	Expenditure that upgrades the sewage network to reduce pollution incidents.
Energy efficiency, renewable energy, clean transportation and green buildings	Net Zero Carbon	Expenditure to change how we operate as a business to reduce our carbon output.
Climate change adaptation	Serving people and places Enhancing the environment	Investment for enhancing the resilience of our water supply and wastewater services in the face of the growing impact of climate change.
Eco-efficient and / or Circular Economy Adapted Products, Production	Enhancing the environment	Expenditure at our bioresources centres that increases value from waste and reduces environmental impact from by-products.
Access to essential services and affordable basic infrastructure	Safe and reliable water supply	Discount for customers so more people can afford our services.
	Affordable bills	Extending our social tariff.
	An effective sewerage system	Connecting new housing developments to our water supply and wastewater networks for the first time.
	Excellent customer experience	Ensuring all our customers receive a great experience and that ensure vulnerable customers are supported as much as possible.
Socioeconomic advancement and empowerment	Serving people and places	Providing drinking water at popular high streets and mobile refill points to use at community events across our region. Promoting and improving access to our recreational facilities across our region for all customers to enjoy. Offering educational support to our customers via the Wessex Water Foundation.

Our ambitious plan for 2025–2030 (AMP 8) includes proposals for £3.5 billion investment in the West of England to protect and enhance the environment, deliver resilience to climate change and support population growth. These projects will be funded by future sustainable finance issuances.

Use of proceeds debt

Wessex Water manages the proceeds of its sustainability bonds with a robust governance structure. Spend is allocated to specific bonds for full transparency for investors, from the point of debt issuance to when proceeds are spent, and in reporting on the ultimate impact of those projects over time. Our approach focuses on a few main principles: transparency, consistency and credibility, with spend aligning to the principles laid out by the ICMA. Due to the size of our programme we look back two years so we can usually confirm spending has occurred before accessing funds. However, if there are funds held from the issuance of a sustainability bond which are not allocated to eligible projects, these funds are held in accordance with our treasury policy and not used to fund dividends.

Sustainable financing instruments

In March 2023 we launched our first "Sustainability Bond" to raise £300m.

Sustainable Bond 2022 £300 million	
Issuer	Wessex Water
Currency	GBP
Amount	300 million
Unique identifier	X52569776136
Issue date	31 March 2023
Maturity date	31 October 2032
Coupon	5.125%

The borrowings were used to refinance eligible projects that delivered environment and social benefits. The value of the eligible projects exceeded the £300m of finance raised. In this report we are looking back two years (2021-22 and 2022-23) for eligible expenditure.

Allocation reporting

Instrument	ISIN	Issue date	Maturity date	Gross proceeds	Amount allocated	Amount unallocated
Sustainable bond	X52569776136	31 March 2023	31 October 2032	300 million	300 million	nil

There are no unallocated proceeds.

Impact reporting

ICMA category	Totex £m	% of cost allocated
Sustainable water and wastewater management	109.6	37%
Terrestrial and aquatic biodiversity conservation	81.1	27%
Access to essential services and affordable basic infrastructure	39.0	13%
Pollution prevention and control	24.9	8%
Eco-efficient and/or circular economy adapted products, production techniques and processes	18.0	6%
Socioeconomic advancement and empowerment	10.6	4%
Environmentally sustainable management of living natural resources and land use	8.7	3%
Climate change adaptation	7.8	2%
Clean transportation	0.2	0%
Renewable energy	0.1	0%
Total cost allocated to ICMA category	300.0	100%

Sustainable water and wastewater management

The highest spending ICMA category is sustainable water and wastewater management, with £109.6m allocated. This expenditure includes investments focused on providing our customers with safe and reliable water supply (£71.8m) and an effective sewerage system (£37.8m).

There are two projects with more than £10m investment: Durleigh WTC reconstruction and the Trym relief sewer.

Durleigh WTC reconstruction £11.6m

Safe and reliable water supply

Durleigh water treatment centre (WTC) is located approximately 2km west of Bridgwater, Somerset, and is our second largest surface water treatment works serving a population of 44,500. The WTC is situated next to a reservoir reservoir that covers 80 acres (32 ha).

The total investment was £50m, taking 36 months to reconstruct the existing WTC which was brought back into service in September 2022 with an output range of between 5 and 30 MI/d. The project was the largest single-value scheme delivered by our capital delivery function, and forms part of the company's long-term water supply strategy for Somerset.

The project benefited from the use of BIM 3D modelling, which enabled improved project and asset information and better management of associated costs, delivery timeline and risk.

The security and emergency measures direction requires all our water treatment sites to be screened for flood risk to determine where further analysis is required. The site at Durleigh was identified as a flood vulnerable site and underwent a detailed flood risk assessment which included topographical surveys, river modelling and further site inspections. This modelling considered climate change with a standard of 20% increase in river flow.

From the results of the modelling work, flood mitigation works were incorporated into the project to give 1:1000-year protection (including climate change impacts).



The protection is achieved by:

- protecting the reservoir bank against overtopping in extreme weather events by provision of a geomat, comprising an asphaltic membrane geomesh, installed over the downstream slope of the dam
- erecting a one metre high flood defence wall along the canal within the site.
- resizing the pedestrian bridge and road culvert to allow clear passage of the 1 in 1,000-year event
- wingwalls and the road being shaped to prevent water backing up on to the site.

Water supply interruptions (mm:ss per property per year)		
Target 22-23	Actual 22-23	Previous year
05:45	04:10	04:12

Water quality customer contacts (number per 1,000 population)		
Target 22-23	Actual 22-23	Previous year
1.12	1.14	1.17

Trym Relief Sewer - £14.3m

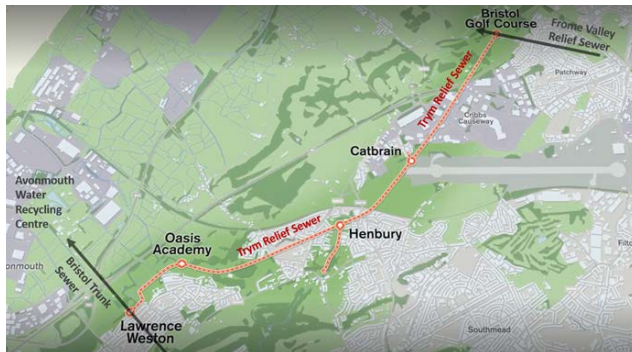
Increasing the resilience of the wastewater and surface water network.

An estimated 85,000 new homes are predicted across the former Avon area by 2036. This scheme represents a £55 million investment in our sewerage network; of this, £14.3m was spent in 2021-22 and 2022-23.

The Trym relief sewer is part of Wessex Water's North Bristol sewerage strategy to reduce flood risk, accommodate new development, improve overflow performance and future proof strategic sewers in North Bristol.

Construction was carried out between August 2019 and December 2022, successfully meeting Ofwat's regulatory compliance date of 31 March 2023.

The sewer transfers flow from the existing Frome Valley relief sewer at Bristol Golf Club, Almondsbury and discharges into the Bristol trunk sewer at Saltmarsh Drive, Lawrence Weston, en route to Avonmouth water recycling centre (WRC) 1km further north.



The main elements of the scheme were:

- 5.5km of 2.85m diameter sewer, installed by a tunnel boring machine, at depths between 18m and 63m
- 1.0km of 1.8m diameter sewer, installed by open cut
- three intermediate shafts, up to 30m deep
- flow control penstocks and associated M&E equipment
- 0.7km of 0.6m diameter sewer, installed by open cut through Henbury green space.

The sewer will increase network capacity and provide 38,000m³ of strategic storage. It will also ensure no deterioration in spill performance at Black Rocks combined sewer outfall, which discharges into the River Avon from the Bristol trunk sewer, upstream of Avonmouth WRC.

To achieve this, pass forward flows within the Trym relief sewer will be managed during storm events using modulating penstocks installed at the bottom of the intermediate shafts. The penstocks are automated, responding to level sensors within the shafts and the receiving Bristol trunk sewer downstream. This ensures that flows are stored and discharged at an optimum rate to ensure the greatest storage volume is always available for the ongoing or next storm event.

Customer engagement started in 2018 with the aim of raising public awareness of the overall scheme, including short-term construction impacts and long-term infrastructure benefits. An animated video was created to explain the tunnelling process with another video released to celebrate the completion of the tunnelling phase.

You can watch the video [here](#)

Importantly this scheme will reduce the frequency of flood events at locations along the River Trym, particularly through the Blaise Castle Estate which provides a popular recreational amenity, and also prevent highly visible storm flooding at Bristol Golf Club.

Below is the reinstated tunnelling compound in August 2023. A level playing area was incorporated for the primary school.



Impact metrics

We spent £37.8m across 21-22 and 22-23 on an effective sewerage system that increased resilience of wastewater and surface water network. Within the £37.8m, £14.3m was spent on the Trym relief sewer.

Terrestrial and aquatic biodiversity conservation

The expenditure of £81.1m under this ICMA category contributes to sustainable abstraction and great river and coastal water quality.

Most of the expenditure was focused on improving overall river water quality. More than 50 water recycling centres (WRC) received investment to increase phosphorus removal to improve the quality of water put into the rivers. Compton Bassett WRC received the largest investment.

Compton Bassett WRC £7.8m

Recovery of river or improvements in overall river/water quality

Compton Bassett water recycling centre (WRC) is located in the north of our region and serves the parishes of Cherhill, Compton Bassett and Heddington, and a large part of Calne parish. The site also treats high strength leachate from the local landfill site.

The WRC catchment is subject to ongoing development with a significant population growth forecast that will likely double the domestic flow and load contributions to the WRC.

Compton Bassett WRC is one of several water recycling centres identified by the EA in the WINEP (the Water Industry National Environmental Programme) and requires process improvements to meet the following regulatory obligations during AMP7 and beyond.

- Increasing flow to full treatment from 17.5 to 54 litres per second.
- Tightened final effluent permit 12:19:14 mg/l (biochemical oxygen demand: suspended solids : ammonia).
- Installation of event duration monitoring (EDM) on storm tank overflows.
- Certified monitoring of FFT at point of storm overflow (MCERTS).

Before the scheme began there was extensive temporary storm overpumping with a standby generator to minimise pollution incidents. There was also a temporary dissolved air flotation plant to support the undersized primary settlement tanks.

Construction works began in January 2022. The scheme met the regulatory compliance date in March 2023, and all construction works including site finishes were fully completed by November 2023.

The scheme was a major upgrade to the works, replacing or upgrading all site processes with only a few existing assets remaining. Dry weather flows have

doubled, FFT has increased by a factor of three, storm pumping increased and storm storage capacity has doubled.

The design also makes allowance for the future provision of further additional treatment processes to comply with the anticipated AMP8 phosphorus removal requirements.

The pictures below show the WRC before and after the investment project.



Access to essential services and affordable basic infrastructure

This category focuses on the social benefits from investing £39.0m encompassing access to clean water and wastewater services and great customer experience.

Our largest area of expenditure in this category was £17.8m on social tariffs and discounts for customers and supporting vulnerable customers.

Social tariff/discount for customers £16.6m

Extending social tariffs to more households living below the poverty line.

Everyone should be able to afford our services and water use should never be rationed by a customer's ability to pay their bill. We are proud that we were the first water company to introduce social tariffs.

Over the years we have built a range of financial support to help customers who struggle to pay their water bills. We deliver our support through strong and effective partnerships with the debt advice sector. Through our tailored assistance programme (tap) we currently provide a range of payment schemes and low-rate tariffs to 55,000 customers.

Our main social tariff, Assist, offers customers discounts of up to 90%, the equivalent of paying just over £1 a week. Customers who need the most support from us, such as the discounts available on our Assist tariff, are required to seek independent debt advice, be that face to face, online or over the telephone.

We believe it is essential that customers receive holistic debt advice and budgeting support along with income maximisation. It is never just about water; customers generally have multiple debts to multiple creditors. Trusted third party organisations are far better able to determine a sustainable level of payment, however small, based on true ability to pay. In 2022-23 we have received 2,474 successful applications.

We have launched a new approach to fast-track up to 60,000 customers on to our main social tariff, Assist. We were pleased to start data matching with the Department for Work and Pensions in November to help low-income pensioners who are often just about managing. We hope we can automatically apply a 20% discount to the bills of up to 55,000 pensioners in receipt of Pension Credit, removing any stigma associated with seeking help.

Social Tariff / Vulnerable customers £1.2m

Extending water use education and help to reduce bills by promoting risk-free metering services – especially among elderly and undereducated people.

We are strongly focused on ensuring vulnerable customers are supported as much as possible. Time has been spent in researching and developing a strategy called Every Customer Matters – An Inclusive Service for all. This is split into four workstreams with a variety of initiatives to help those that need it.

- Using data wisely
- Growing partnerships
- Community engagement
- Improving the customer journey

These workstreams aim to bring social benefits such as:

- helping customers who may be in stressful financial situations
- meeting the needs of customers who require a tailored service allowing them to feel comfortable in contacting our teams
- increasing customer engagement
- breaking down barriers to engagement and reaching those who might not otherwise be heard
- making it easy for customers to know about and access our support.

For specific example in each workstream and more information about our Vulnerability Strategy “Every customer matters” click here [Affordability](#).



Pollution prevention and control

Investment in this category is focused on protecting the environment from pollution while promoting great river and coastal water quality. £24.9m has been invested

Sewer rehab/no dig solutions - £5.7m

Upgrade of sewerage/sewage treatment to reduce pollution incidents.

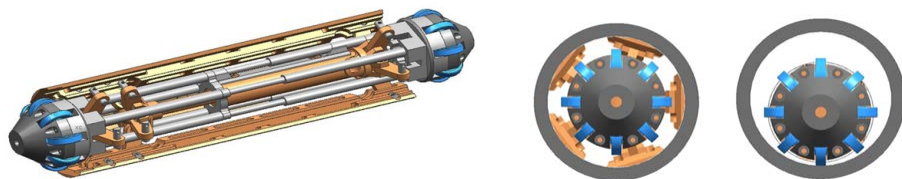
Our underground sewer network is c35,000km, thus prohibitively expensive to monitor or inspect in its entirety. Therefore, risk models are used to target the strategic and vulnerable sections of our network, which helps us prioritise which sewers and tunnels are regularly inspected and the locations where investment is required.

Traditionally, sewer repair and maintenance involved digging trenches on the public highway, which is expensive and disrupts drivers and pedestrians. Our sewer rehabilitation team was formed in 2004 to reduce the cost of rehabilitation of defective sewers, using trenchless 'no-dig' techniques, and give our customers a better experience in the process. This has been a tremendous success.

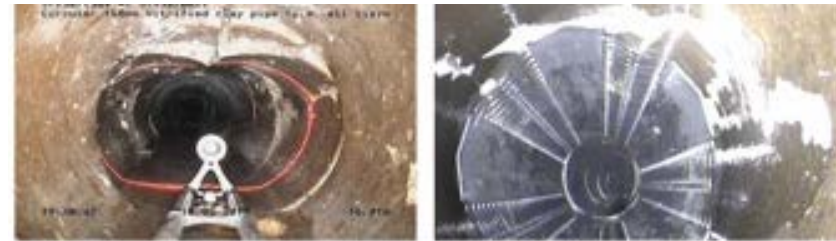
Our in-house R&M team has introduced several ground-breaking processes, including a robotic machine for re-rounding deformed pipes and inserting structural resin liners into sewers, otherwise known as cured in place pipelines (CIPP).

A robotic machine for re-rounding deformed pipes

The machine is versatile and can be used with rigid clay or concrete sewer pipes as well as pitch fibre pipes.



Once the robot rounds the pipe it leaves in place a permanent metal stent. The pictures top right show the deformed sewer pipe before and after the stent has been fitted.



Inserting structural resin liners into sewers (CIPP)

We use a chemical monomer called Styrene, to assist in the curing or cross polymerisation of the wet liner into a solid structural pipe within a pipe, designed for 50-100 years longevity. The pictures below show a brick egg sewer before and after rehabilitation with a resin liner.



There are many environmental and social benefits arising from the two processes.

- Reducing the need to dig up the public highway results in less inconvenience for the public, and less disturbance of protected flora and fauna.
- Significant reduction in carbon emissions from less excavation and reinstatement, and not having stationary traffic at works.
- The avoidance of removing of tons of material during excavations.
- Increasing the asset life of the sewers significantly and in many cases completely replacing failed sewers, bringing them back to full operational design.
- Avoiding very costly unplanned repairs.

Eco-efficient and/or circular economy adapted products, production techniques and processes

Poole Bioresources Centre £13m

Enhancing the environment and increasing value derived from by-products of sewage treatment.

The largest expenditure in this category was at Poole Bioresources Centre (BC), which received £13m of the £18m spent on this theme.

Poole Bioresources Centre is a major strategic site, treating sludge produced at Poole WRC as well as sludge imported from other Wessex Water treatment sites in the southern part of our region.

Poole BC comprises primary and secondary sludge digestion. The total scheme value is in the region of £30m and is forecast to complete by March 2025.

Refurbishment of Poole BC will ensure the site meets current standards for sludge treatment and provide reliable digestion capacity to treat 316m³/day of indigenous sludge and 158m³/day of imported sludge. In addition, it will increase the generation of renewable energy.

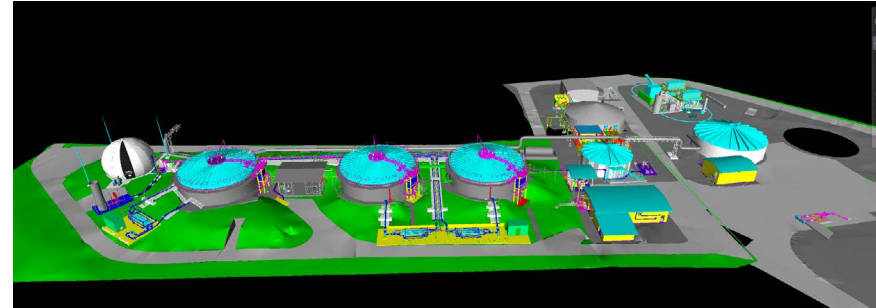
The scheme will provide refurbished sludge treatment plant, including:

- tanker imports area
- raw sludge screening and thickening plant
- raw sludge holding tanks
- primary digestors, sludge pumping and pipework
- hot water heating systems
- gas containment, storage, mixing and boosting plant
- digested sludge dewatering plant
- HV electrical plant, lightning protection, odour treatment, secondary digester cleaning, and monitoring
- instrumentation, automation and control systems.

The scheme comprises three delivery stages:

1. Raw sludge conditioning and thickening prior to digestion.
2. Refurbishment of primary digestors and associated mechanical & electrical and gas systems; odour treatment; refurbishment of secondary digester and the control system.
3. Digester and system commissioning.

The diagram below shows the final layout of Poole Bioresources Centre; the turquoise highlights the structures benefiting from the investment.



Below left shows the three anaerobic digestors. Digester 1 is in the foreground with the stainless-steel framework erected awaiting the roof and digester 2 is in the process of having the old roof and supporting structure removed. Below right shows anaerobic digester tank one with its new stainless-steel fixed roof, which cost £500k.



When the investment scheme is completed it will contribute to the following performance commitments and key performance indicators:

- reduction in greenhouse gas emissions (E5).
- satisfactory sludge disposal (E8).

Socioeconomic advancement and empowerment

The customers and communities that we serve were the main beneficiary of £10.6m of investment focusing on education, access to community amenity and recreational facilities, and wider community projects.

Engaging communities £2.3m

Access to community amenity and recreational facilities

This theme has four work programmes.

Permanent water refill points

Our water refill project includes the installation of 24 refill points in high streets across our region, to promote the use of tap water and reduce single-use plastic.

Mobile water refill units

Our provision of 15 mobile refill points at community events, including the Bath Half Marathon and other local sports events, also promotes the use of tap water, and reduces single-use plastic.

Accessibility and customer engagement for reservoir recreation sites

Capital improvements included new landscaping and facilities at our customer recreation sites, and work to improve access for disabled and less able visitors and provide better explanation of our assets and the water cycle.

Development and Improvements to our website community area

Providing regional information for customers, now replaced by the latest version of the website.

Wessex Water Foundation £1.4m

The [Wessex Water Foundation](#) (WWF) funds projects that strengthen communities and benefit the environment, while also providing local groups and charities with volunteering support.

The WWF is administered by the Quartet Foundation on our behalf and donates more than £500,000 per year to charitable causes. A broad breakdown of funding in a typical year is shown opposite.

Environment - major partners	£70,000
Debt advice - core funding	£225,000
Community funding	£155,000
Environment fund	£65,000
Total	£515,000

This year, in recognition of the cost-of-living crisis for our customers, we provided an additional £160,000 to our debt advice partners to fund new adviser roles and hours, training courses, presence in warm spaces and other outreach projects.

Find out more information on the options available for [Debt advice](#).

Impact metrics

In 2022, 67 charitable and community groups benefited from our Community Fund; and 63 community groups benefited from our Environment Fund.

For those needing debt advice before applying for one of our schemes, the following non-profit organisations are able to help:

- StepChange
- National Debtline
- Citizens Advice
- Scope
- deafPLUS

Environmentally sustainable management of living natural resources and land use

The £8.7m expenditure under this ICMA category is focused on increasing biodiversity on Wessex Water's landholding. Our Priority Habitat Restoration and Re-creation project aims to bring 25 hectares (ha) of priority habitat into favourable or recovering condition by March 2025. This includes creating new priority habitat for wildlife, covering 10 ha.

The company's Conservation, Access and Recreation (CAR) Team have identified the most suitable areas within the company's landholding to carry out this habitat enhancement and creation.

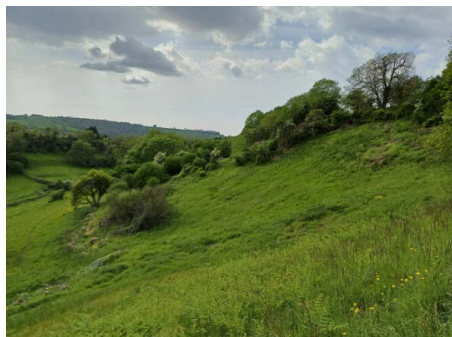
Such habitat creation and enhancement work can take many years to come to fruition. It often involves re-instating sustainable farming practices, setting up the necessary infrastructure and building relationships with local people and farmers to ensure appropriate management is assured into the future.

Charmy Down

Situated close to Chilcombe Bottom Nature Reserve, Charmy Down supports a range of specialised plants and insects not found in other grasslands. However dense scrub had grown across the site in the last 50 years, threatening this rare habitat and impacting the ability of species such as clustered bellflower, wild thyme, and bee orchid to flourish.

Our programme, which got underway in September 2022, is seeing the scrub cleared back to the levels of the late 1970s. This will allow a rarer suite of plants and insects to re-establish over the hillside, with certain areas also re-seeded with a local grass and wildflower seed mix. While mature woodland areas will be retained, woodland management is taking place to help achieve the desired mix of open and densely vegetated habitats - this is known as managing a 'mosaic habitat'.

The pictures below show the situation in 2021 before our work began (left), and in 2023 after the scrub was cleared (right). Seven other fields that have been restored in a similar way.



In order to sustainably manage the recovering grassland habitat into the future, a suitable conservation grazing regime is required. This means that the location and timing of cattle grazing needs to be closely controlled, which can be challenging within the landscape of a steep Cotswold escarpment.

Financial investment at the 10 ha site included installing hard-wearing fencing (with a 30-year life expectancy), new strategically placed water troughs and associated pipe work. This will allow the livestock owner to move cattle around the site at varying densities. This will ensure that the hard-to-access slopes receive the right level of grazing at the right time of year.

We have also refurbished the flight of steps on the public right of way that bisects the site, to ensure public safety and enjoyment of this spectacular landscape.

For more information see wessexwater.co.uk/visit-and-learn/chilcombe-bottom-nature-reserve



Climate change adaptation

The expenditure of £7.7m under this category provides multiple benefits including provision of safe and reliable water supply, an effective sewerage system and sustainable abstraction. Climate change is bringing many challenges in the provision of water and wastewater services. We have identified 10 WRC locations that are especially vulnerable to the climate change impacts, with resulting investment being focused mainly on reducing flood risk and upstream sewer flooding. The biggest investment was at Portbury Wharf WRC with £1.7m spent during 2021-22 and 2022-23.

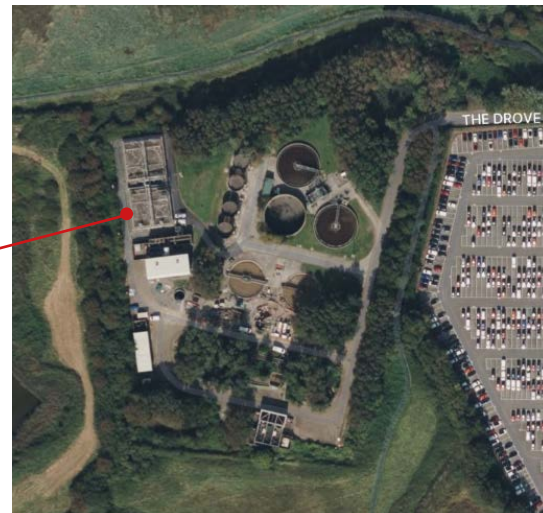
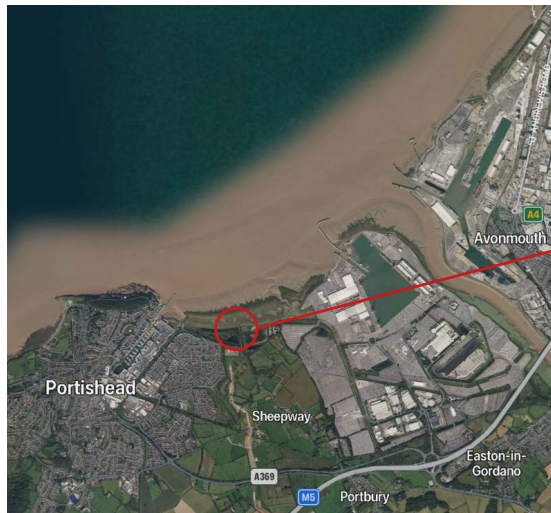
Portbury Wharf WRC flood defence £1.7m

Our [Climate Change Adaptation Report 2021](#) includes our plans to improve flood defences.

Portbury Wharf WRC (see red outline) is located behind the Severn Estuary sea wall. The pictures below show its proximity to the Severn Estuary.

In anticipation of high astronomical tides and the greater impact of climate change, the decision was taken to invest in enhancing the flood defences at Portbury WRC. Several options were considered with the most effective being a local sea defence around the perimeter of the WRC only. Total investment of £1.7m was included in our PR19 Business Plan as a resilience scheme and approved by Ofwat.

During 2022-23 a sea wall was constructed around the WRC, at a height of 9.5mOD (16mCD), being the 1 in 200-year flood level (National Planning Policy Framework design flood), plus allowance for 30 years' climate change and 300mm freeboard. To the right are pictures of the sea wall.



Clean transportation, renewable energy and energy efficiency

Clean transport

Our fleet of vehicles comprises three groups: company cars, small commercial vehicles, and large commercial vehicles.

Progress on transitioning our fleet from fossil fuel to clean energy has been determined by operational requirements, and evolution in green technology for each group.

Electrification of cars and small vans is underway with the market approaching maturity. We are assessing the feasibility of installing charging infrastructure to limit any negative impacts on productivity and customer service.

Most of our fleet are commercial vehicles and the transition to clean energy will take longer. This is due to the motor industry grappling with the challenges of improving the towing ability, payload, and range of EVs. Since 2020, six HGVs running on Bio-CNG (compressed natural gas) have been operating from our Avonmouth site. CNG fuelled vehicles offer 20% less CO₂ v diesel.

The conversion of diesel engines to run on hydrogen is possible but the transport and storage of hydrogen is difficult. This remains a barrier to the motor industry for the widespread adoption of hydrogen, but we believe it will be an important option for larger vehicles.

Maintaining customer service is paramount for us and our aim is to migrate our commercial vehicles (small first, then large) on to clean energy in a controlled manner that does not affect customers.

Renewable energy

Investigations are progressing to incorporate behind-the-meter solar PV on-site and on neighbouring land, alongside 'sleeving' remote renewables into our electricity supply contract. In addition, we are looking to increase our existing renewable generation output.

Energy efficiency

We use advanced monitoring and targeting data to benchmark our asset energy use in order to identify areas where we can save energy, cost, and carbon. There are further opportunities to advance our use of data intelligently, alongside energy efficiency projects aimed at optimising energy use on site.



Appendix

ICMA category	£m	Totex £m
Sustainable water and wastewater management - <i>Safe and reliable water supply</i> - <i>An effective sewerage system</i>	71.8 37.8	109.6
Terrestrial and aquatic biodiversity conservation - <i>Great river and coastal water quality</i>	81.1	81.1
Access to essential services and affordable basic infrastructure - <i>Access to clean potable water and wastewater services</i> - <i>Great customer experience</i>	20.9 18.1	39.0
Pollution prevention and control - <i>Upgrade of sewerage/sewage treatment to reduce pollution incidents</i> - <i>Reduced airborne emissions</i>	21.2 3.7	24.9
Eco-efficient and/or circular economy adapted products, production techniques and processes - <i>Increasing non-potable water recycling</i> - <i>Increased value and reduced environmental impacts from byproducts</i> - <i>Optimisation of biosolids recycling</i> - <i>Increasing value creation from waste via recycling to a substitute products and moving up the waste hierarchy</i>	13.0 2.7 1.9 0.4	18.0
Socioeconomic advancement and empowerment - <i>Access to employment and education</i> - <i>Access to community amenity and recreational facilities</i>	8.2 2.4	10.6
Environmentally sustainable management of living natural resources and land use - <i>Improving or reducing the overall impact of Wessex Water on land</i>	8.7	8.7
Climate change adaptation - <i>Reduced risks associated with extreme weather events and gradual changes linked to climate change</i>	7.8	7.8
Clean transportation	0.2	0.2
Renewable energy	0.1	0.1
Total	300.0	300.0



Assurance Statement

Independent Limited Assurance Report to the Directors of Wessex Water Services Limited

Wessex Water Services Limited (“Wessex Water”) commissioned DNV Business Assurance Services UK Limited (“DNV”, “us” or “we”) to conduct a limited assurance engagement over Selected Information presented in the “Sustainable Finance Allocation and Impact Report March 2024” (the “Report”) for the reporting year ended 31st of March 2023.

Selected Information

The scope and boundary of our work is restricted to the “Selected Information” included within the Report for the reporting year ending the 31st March 2023 and listed below.

- The claims and assertions relating to the allocation of funds under Wessex Water’s Sustainable Finance Framework

To assess the Selected Information, which includes an assessment of the risk of material misstatement in the Report, we have used Wessex Water’s Sustainable Finance Framework September 2022 (the “Criteria”), which can be found [here](#).

We have not performed any work, and do not express any conclusion, on any other information that may be published in the Report or on Wessex Water’s website for the current reporting period or previous periods.

Our Conclusion

On the basis of the work undertaken, nothing came to our attention to suggest that the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria.

This conclusion relates only to the Selected Information, and is to be read in the context of this Independent Limited Assurance Report, in particular the inherent limitations explained below.

Basis of our conclusion

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information; our work included, but was not restricted to:

- Conducting interviews with Wessex Water management to obtain an understanding of the key processes, systems and controls in place to generate, aggregate and report the Selected Information;
- Performing limited substantive testing on a selective basis of the Selected Information to check that data had been appropriately measured, recorded, collated and reported;
- Assessing the appropriateness of the Criteria for the Selected Information; and
- Reading the Report and narrative accompanying the Selected Information within it, with regard to the Criteria.

In performing these activities, we did not come across limitations to the scope of the agreed assurance engagement. We found a limited number of non-material errors, and these were corrected prior to inclusion in the Report.

Responsibilities of the Directors of Wessex Water and DNV

The Directors of Wessex Water have sole responsibility for:

- Preparing and presenting the Selected information in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the Selected Information that is free from material misstatements;
- Measuring and reporting the Selected Information based on their established Criteria; and
- Contents and statements contained within the Report and the Criteria.

Our responsibility is to plan and perform our work to obtain limited assurance about whether the Selected Information has been prepared in accordance with the Criteria and to report to Wessex Water in the form of an independent limited assurance conclusion, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the Report.

Standard and level of assurance

We performed a limited assurance engagement of specified data and information using the international assurance best practice including the International Standard on Assurance Engagements (ISAE) 3000 - 'Assurance Engagements other than Audits and Reviews of Historical Financial Information' (revised) issued by the International Auditing and Assurance Standards Board. To ensure consistency in our assurance process, we conducted our work in accordance with DNV's assurance methodology, Verisustain™, applying only the pertinent sections of the protocol relevant to the specific purpose of the activity. This methodology ensures compliance with ethical requirements and mandates planning and execution of the assurance engagement to obtain the desired level of assurance.

DNV applies its own management standards and compliance policies for quality control, which are based on the principles enclosed within ISO IEC 17029:2019 - Conformity Assessment - General principles and requirements for validation and verification bodies, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and are shorter in extent than for a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained if a reasonable assurance engagement had been performed.

Inherent limitations

DNV's assurance engagements are based on the assumption that the data and information provided by Wessex Water to us as part of our review have been provided in good faith, is true, complete, sufficient, and authentic, and is free from material misstatements. Because of the selected nature (sampling) and other inherent limitations of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. The engagement excludes the sustainability management, performance, and reporting practices of the Company's suppliers, contractors, and any third parties mentioned in the Report. We understand that the reported financial data, governance and related information are based on statutory disclosures and Audited Financial Statements, which are subject to a separate independent statutory audit process. We did not review financial disclosures and data as they are not within the scope of our assurance engagement.

Our competence, independence and quality control

DNV established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV did not provide any services to Wessex Water in the reporting period that could compromise the independence or impartiality of our work. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.

DNV Supply Chain and Product Assurance

DNV Business Assurance Services UK Limited is part of DNV - Supply Chain and Product Assurance, a global provider of certification, verification, assessment and training services, enabling customers and stakeholders to make critical decisions with confidence. www.dnv.com/about/supplychain/

Disclaimers

The assurance provided by DNV is limited to the selected indicators and information specified in the scope of the engagement. DNV has not conducted an assessment of the reporting organisation's overall adherence to reporting principles or the preparation of the report. Therefore, no conclusions should be drawn regarding the reporting organization's compliance with reporting principles or the quality of the overall report. The assurance provided by DNV is based on the selected indicators and information made available to us at the time of the engagement. DNV assumes no responsibility for any changes or updates made to the indicators or information after the completion of the assurance engagement.

Use and distribution of our Independent Limited Assurance Report

This report is intended solely for the information and use of the Directors of Wessex Water and is not intended to be and should not be used by anyone other than these specified parties. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Limited Assurance Report.

For and on behalf of DNV Business Assurance Services UK Limited

London, UK
22nd March 2024

The certified version of this assurance report can be found on the [Sustainable Finance Allocation and Impact Reporting](#) page of our website.



Wessex Water
YTL GROUP

FOR YOU. FOR LIFE.