

Our Contribution to Yorkshire

Annual public value report

For the year ended 31 March 2024



Published November 2024



YorkshireWater

How to view this document

Contents page

Our contents page links to every section within this document. Clicking on a specific section will instantly take you to it.

- 1 Click on the contents button to return to the contents page.
- 2 This button takes you to the previous page.
- 3 This button takes you to the next page.

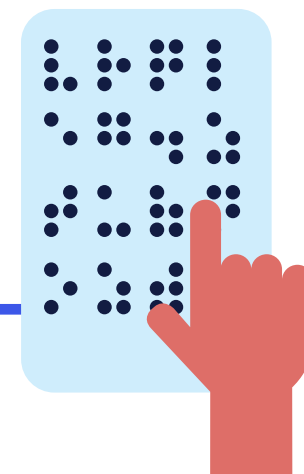
There are also many other clickable links within this document which we've made easy to spot by underlining and **highlighting** them in blue.

Accessibility matters. That's why we want all of our customers to be able to engage, navigate, and understand this *Our Contribution to Yorkshire Report*.

By using assistive technology like screen readers, text-to-text speech programmes and Braille displays, we can provide equal access to anyone with visual, mobility, or cognitive impairments.

We've taken steps to ensure this document supports additional accessibility needs:

- Screen readers will recite content in a logical order, as well as identifying headers and providing alternative text for images.
- Table of contents and bookmarks to aid navigation.
- Easy-to-read text that's structured using headings, clear paragraphs and tables.
- Comfortable colour contrast.



Contents

We've created colour-coded sections to help you to navigate this report easily. Just click on the section you'd like to read below.

The report is structured as follows:

Foreword	4
Executive summary	5
Introduction	11
Guide to our results	14
Trusting this information	20
Financial capital	21
Manufactured capital	23
Natural capital	28
Human capital	34
Intellectual capital	38
Social capital	41
Conclusion	47
Appendix 1. Independent limited assurance report	49

Find more information in the supporting documents listed below at yorkshirewater.com/capitals

- Methodology report, including a glossary of terms
- Data tables
- Sustainable Finance Framework *Allocation Report*



Foreword

I am pleased to share this publication of *Our Contribution to Yorkshire* with you.

Over the last 12 months, I have been proud to see the many ways in which we make a real difference to the lives of our customers, colleagues, communities and the environment across Yorkshire.

Our successes this year include a notable reduction in leakage on our clean water network – staying on track to achieve a 15% reduction between 2020 and 2025 – and also in how we provided financial support to over 120,000 customers who were struggling to pay their bills.

For our colleagues, a continued focus on safety and wellbeing has led to Yorkshire Water's lowest ever lost time injury rate. And through our community engagement activities, we've delivered over 37,000 hours of learning opportunities to schools and education centres across the region.

In some other areas, our performance has not been as strong as we would like it to be. In particular, there was an increased number of discharges from our combined sewer overflows, as well as increased pollution incidents.

As we move into a new five-year regulatory period, we're building on our successes to shape our future business plans and management activities, focusing on areas with the greatest potential for improvement to create value. We know we can achieve more when we work together, which is why I encourage our stakeholders to join us in addressing shared challenges to deliver meaningful change for the region.

At such a crucial time for the water sector, we'll continue to strive for improved environmental, social, and economic outcomes for Yorkshire. I extend my thanks to all colleagues across Yorkshire Water for their efforts this year. Together, I'm confident we can work towards achieving our vision of a thriving Yorkshire, right for customers and right for the environment.

Nicola Shaw, CBE
Chief Executive Officer

Executive summary

**Welcome to
*Our Contribution
to Yorkshire,*
our annual public
value report.**

This report provides an assessment of the value generated by our business during the year to the end of March 2024.

Yorkshire Water exists to provide water and wastewater services to the people and businesses of the Yorkshire and Humberside region. We play an essential role in safeguarding public health and supporting regional growth by delivering reliable, affordable and high-quality services to our customers.

Our activities also create further value for our stakeholders and our region. This includes the social value we create by supporting our vulnerable customers, the economic value we generate by creating skilled employment opportunities, and the environmental value we create through our work to enhance biodiversity and protect sensitive habitats.

We are committed to being transparent about our performance to build trust with our stakeholders and promote accountability for our actions. In this report we use a 'six capitals' framework to help us assess the value we create for our stakeholders across the region.

Our evaluation shows that we make a strong overall positive contribution on most issues. However, we recognise that we need to improve our performance in some areas – for example, by reducing sewer flooding and improving river health.

Understanding the value of our activities helps us prioritise further investment to improve performance in future. This year we developed our next business plan for the 2025 to 2030 period, which proposes £8.2bn of investment for the region including our largest ever environmental improvement programme.

Our plan will ensure it delivers the right outcomes for Yorkshire. However, it has also been developed with the long-term in mind, so that decisions taken to improve the efficiency of our services are not made at the expense of our long-term resilience or affordability for future generations.

Together, this will help us achieve our vision of creating a thriving Yorkshire: right for customers and right for the environment.

Highlights

Safe and reliable water and wastewater services



Drinking water quality in the UK is among the highest in the world and providing safe, reliable, and affordable services for our 5 million household and 140,000 business customers plays a key role in safeguarding public health, social wellbeing and economic development across our region.

Delivering our services is a complex and important job. Across Yorkshire, we operate 50 water treatment works, 605 wastewater treatment works, and a network of over 80,000km of clean water and wastewater pipes. We invest £2m every day to maintain and enhance this critical infrastructure.

We operate 24 hours a day, 365 days a year, to make sure our customers receive the high-quality services they need and expect. Last year, we delivered almost 400 billion litres of water to our customers with an average supply interruption of less than 11 minutes per property. This level of performance promotes confidence and trust in the services we provide and is valued by customers across the Yorkshire region.

1.3 billion litres of water
treated and delivered every single day

Enough to fill around 550 Olympic-sized swimming pools

80,000km
clean water and wastewater pipes

Laid end-to-end these would stretch twice around the world

Keeping bills affordable



We aim to deliver value for money to our customers and keep bills as low as possible, while also ensuring our long-term resilience and affordability for future generations. Our average combined household bill this year was £467, which translates to an average daily cost of 54 pence per household customer. We also offer support to customers who struggle to pay their water bill through our social tariff options, debt schemes, and domestic water meters.

54 pence

Average
daily cost
per household
customer

124,000

Customers provided
with financial support
to help pay their bill

Driving down leakage



We know that reducing leakage is hugely important to ensure we operate efficiently and sustainably manage the water we abstract from the environment. This year we've seen continued success in reducing leakage from our clean water network to 260ML/day (2023: 283ML/day). Our current level of performance improvement puts us on course to meet our commitment to reduce leakage by 15% over the five years from 2020 to 2025. This value for Yorkshire is a result of the significant investment we make each year to repair leaks and replace older pipes to ensure we manage our water resources effectively.

12.7%

Leakage reduction since 2020

Investing in people



We create value for Yorkshire by investing in people to improve their professional development and encourage social mobility across the region. This year, we supported 100 colleagues to begin new apprenticeships across Yorkshire Water. We also provided 72,000 learning hours for our wider colleagues to support their career development and ensure our workforce has the right skills, knowledge and behaviours needed to deliver our high-quality services for our customers in future.

100

New apprentices

Industry-leading safety performance



Health, safety and wellbeing is paramount in all that we do. This year, we achieved our lowest ever lost time incident rate (LTIR) with a result of 0.10, which takes us to a world class level of safety performance. Our focus on these issues creates value for colleagues, customers and partners by ensuring their health, safety and wellbeing is protected as we operate and maintain our network.

0.10

Lowest ever lost time incident rate

Supporting regional employment and growth



As one of the region's largest employers, we provide jobs for over 3,700 colleagues. We take pride in knowing that over 90% of our colleagues who help make Yorkshire Water a great place to work and build a career are locally based. We also support the growth of businesses across Yorkshire with 35% of our spend going to local suppliers. This investment creates value by supporting over 2,000 local employment opportunities in our supply chain, demonstrating the wider economic and social contribution we bring to the region through our work.

92%

of our colleagues live in Yorkshire

35%

spend with local suppliers

Engaging our colleagues



We aim for an inclusive working environment for all our colleagues that supports engaged, high-performing teams. Since launching our 10-year corporate strategy last year, we've seen our colleague engagement score increase to 72% (2023: 63%). This reflects the activities we've carried out to engage colleagues around our new strategy and ensure they feel valued and fulfilled in their roles, which in turn ensures they can continue to deliver the essential services that our customers value across Yorkshire.

72%

Colleague engagement score

Community education and awareness



We offer a range of education programmes to local schools to provide learning opportunities for primary and secondary students. This year we welcomed 37,000 participants on our programmes, including visitors to our education centres and activities we carry out in schools across the region. Our education programmes create value by helping students to learn about safety around water and, how they can help support us in doing the right thing for the environment. Through our community education programmes, we also introduce participants to opportunities for their own professional development and future careers. This creates value by supporting social mobility, particularly for our younger customers across Yorkshire.

37,000

participants in our free public education programmes

Areas for improvement

Tackling sewer flooding



Internal and external sewer flooding performance has been challenging in 2024. We recognise the impact that this has on customers and we are committed to driving down rates of sewer flooding in future by making our infrastructure more resilient.

We're investing in new technologies to help prioritise work on our sewer network, including digital survey equipment and installation of real-time flooding alarms. We're also transforming our planning and scheduling processes within our sewer network team to improve our productivity, response and resolution times.

40,000

Customer sewer alarms installed to help identify and address potential sewer flooding incidents before they occur

Keeping our rivers, coasts and seas healthy



We saw a decline in our overall pollution performance in the 2023 calendar year, with 137 incidents compared to 117 in 2022 and five of these incidents classified as 'serious pollution'. The number of discharges from storm overflows also increased by 44% in the 2023 calendar year compared to the previous year. We recognise that this aspect of our performance adversely impacts the overall value we contribute to the region.

To address this, we're making significant investments in technologies and processes to improve our performance in relation to wastewater discharges, both now and over the long-term. By the end of March 2025, we'll have completed a £180m investment programme, which will reduce wastewater discharges by delivering surface water separation, additional storage and treatment capacity, and water butt solutions across 130 storm overflows with the highest numbers of discharges in the region.

We're also installing new treatment equipment at our wastewater treatment works to reduce the amount of phosphorus entering Yorkshire's rivers and seas. Between 2020 and 2025, we'll have invested £500m in phosphorus removal schemes to improve the health of waterways across the region, with plans for further investment to ensure we can continue to grow the value we contribute to Yorkshire in future.

£180m

Additional investment to reduce wastewater discharges by 2025, with a further £1.4bn of investment by 2030

56%

Reduction in phosphorus from investment in wastewater treatment works between 2020 and 2025

Reducing carbon emissions



Our carbon emissions this year were slightly higher than last year. This increase was driven mainly by higher energy usage from pumping on our wastewater network in response to above-average rainfall during the year.

We have a big role to play in addressing climate change and are working towards achieving net-zero carbon emissions in our operations, and reducing the emissions created in building our assets. Our business plan for the 2025–2030 period includes proposals to increase self-generated renewable energy, reduce emissions from our wastewater processes, and optimise whole life carbon arising from our capital programme. We're also investing in nature-based solutions to further reduce carbon emissions, support biodiversity, and increase resilience. Together, these will create value by ensuring we can operate efficiently and place us on track for a net-zero future by 2050.

18%

**Fleet electrified
by 2025**, with a target
of 63% by 2030

18%

Renewable energy generation*,
with a target of 40% by 2030
*self-generated or private wire

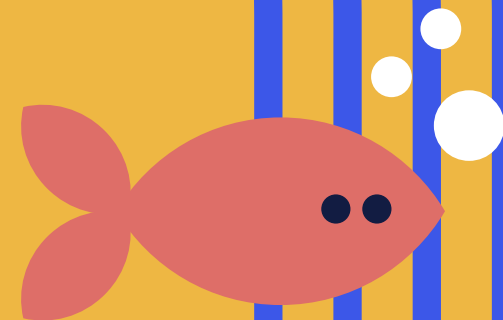
Conclusion

Our annual assessment demonstrates the significant contribution we bring to the health, wellbeing, and prosperity of the Yorkshire region. However, we know there is more to do to improve some areas of our performance, particularly with respect to our impacts on the environment. To address these issues, we will shortly be commencing our largest ever environmental improvement programme as part of our business plan for the 2025 to 2030 period.

**This will help deliver our vision for
the region: 'A thriving Yorkshire.
Right for customers. Right for the
environment.'**



Introduction



About Yorkshire Water

Yorkshire Water provides some of life's most essential services to the people and businesses of Yorkshire, playing a key role in the region's health, wellbeing, and prosperity. We do this by supplying water and wastewater services to over 5 million people and 140,000 business properties, as well as being custodians of essential infrastructure and the natural environment.



Our vision is to create 'A thriving Yorkshire: right for our customers, right for the environment'.



We collect, treat and supply around **1.3bn litres** of water every day



We collect, treat, and safely return to the environment **2.2bn litres** of wastewater and rainwater every day



We provide jobs for over **3,700 colleagues** across Yorkshire



We invest **£2m every day** to maintain and enhance Yorkshire's network of pipes, pumps and networks



We contribute to the wider economy, **spending over £1bn on goods and services** from **1,200 suppliers** each year



We **manage £1bn of water bills** every year

About this report

This report presents the findings of our latest six capitals assessment of the value created through our business activities for our stakeholders over the financial year from April 2023 to March 2024. We call this *Our Contribution to Yorkshire*.

We publish our assessment findings annually to help track our performance over time. In this report we explore the findings of our latest six capitals assessment, as well as providing a range of case studies to help bring what we do to life.

There's also a separate Methodology Report, which gives more detail about how we create this report. You can find these documents at yorkshirewater.com/capitals

Sustainable Finance Framework

We raise finance from a variety of sources to help fund our activities and investments into the business. In early 2019, we introduced our Sustainable Finance Framework in which we committed that all finance raised under the framework would be allocated only to activities that benefit people and the environment. We refreshed our Framework in November 2023 and will carry on using it to raise almost all of our finance in future.

As of 31 March 2024, we've raised £2.1bn through our Framework. This report is designed to meet the commitment we made in our Framework to report annually on our environmental and social impact. A range of metrics can be found throughout this report, supported with commentary and case studies.

To accompany this main report, which is designed for all interests in Yorkshire Water, we also provide an *Allocation Report* with more information specifically for the investor community, including details of debt allocations. A link can be found on the [Contents page](#).

Guide to our results

How we create value

As Yorkshire's water and wastewater utility provider, our work plays a vital role in safeguarding public health and supporting economic development across the region. Each day, we collect, treat and supply over a billion litres of clean, safe water to our millions of customers, and remove and treat an equivalent amount of wastewater.

We know that our business activities have significant impacts on those around us. These impacts stem largely from the services we provide to our customers, but also come from our employment practices, how we treat our suppliers, and how we manage our extensive land holdings.

We also know these impacts may be positive or negative – in other words, that through our business activities we may create or reduce value for stakeholders. Indeed, we may do both at the same time. For example, by investing in new water treatment works, we improve the security and quality of water supplies for our customers. But, in doing so, we increase greenhouse gas emissions and consumption of natural resources because treating water is an energy- and chemical-intensive process.

We take a responsible approach to business. To do so, we need to understand these trade-offs, making sure that we minimise the negative impacts of our business activities, whilst also seeking opportunities to create positive impact where possible to grow value for society as a whole.

Different types of value

We contribute to the creation of several different types of value through our day-to-day activities. By providing water and sanitation services, we safeguard the health and wellbeing of individuals and contribute to regional economic growth. By offering skills training, we support our colleagues to advance their careers. And through our environmental programmes, we help to protect and enhance biodiversity and habitat quality across the region.

In our assessment, we use six types of value, which we refer to as 'capitals': **financial, manufactured, natural, human, intellectual and social**. These capitals may increase or decrease as we grow or reduce value for our stakeholders.

Six Capitals



Financial capital

Our financial health and efficiency



Manufactured capital

Our pipes, treatment works, offices and IT



Natural capital

The materials and services we rely on from the environment



Human capital

Our workforce's capabilities and wellbeing



Intellectual capital

Our knowledge and processes



Social capital

Our relationships and customers' trust in us

Our six capitals approach is designed to help us make decisions that will enable us to become more sustainable and resilient by better understanding, and therefore better managing, the impacts of our business activities. This should help us to protect and improve the long-term value we deliver for customers, colleagues, and other stakeholders as we work towards our vision of a creating a thriving Yorkshire.



Identifying our stakeholders

There are a wide range of stakeholders that shape our thinking as a business. We've identified five key stakeholder groups that we impact most through our work as shown below.

However, we know that overlaps exist between different stakeholder groups. For example, we live and work in the communities in which we operate, and most of our colleagues are also our customers, as are their neighbours and extended families. This creates an even greater responsibility to always be aware of how our actions make a difference to the value we create for our stakeholders, both now and in the long-term.



Customers and communities

This includes household and business customers, non-governmental organisations, local authorities, landowners, and other individuals affected by what we do.



Environment

This includes air, land, rivers, and seas within and beyond the Yorkshire region. We consider the environment to be an important stakeholder because it materially affects, and is affected by, our business decisions.



Colleagues

This includes full-time and part-time employees of Yorkshire Water.



Suppliers and partners

This includes contract partners, external consultants, first tier suppliers of goods and services, and lower tiers of our supply chain.



Investors

This includes our shareholders and debt investors, who manage funds on behalf of organisations and individuals.

Our impact assessment process

In this report, we look beyond the financial balance sheet to assess the wider value we deliver through our work.

Our assessment considers value through two lenses:

- **Capitals** – what kind of value are we creating?
- **Stakeholders** – who are we creating value for?

For each capital, we present annual accounts for the period April 2023 to March 2024. These include a range of indicators that measure our assets and the outputs of our activities. Where possible, we also present the monetised impacts of these outputs for different stakeholder groups. This allows us to compare very different issues in a common unit of measurement, although we know that not everything can be valued precisely like this.

Key elements of our six capitals assessment

Asset

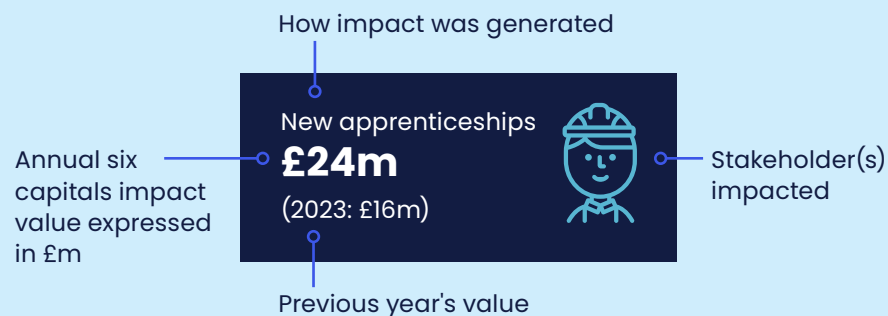
A stock of resources, such as the land we own. Assets can be measured by extent (quantity) or condition (quality).

Output

A measure of positive or negative change resulting from how we've maintained and used our assets, which may indicate a change in value. Outputs typically reset to zero each year.

Impact

The degree to which an output is considered to be of value to our stakeholders. Impacts are valued across the six capitals and are expressed in monetary terms to provide a common unit of measurement.



Identifying our material impacts

We create many different value through our business activities, both positive and negative. Positive value comes from the activities that our stakeholders consider as having beneficial effects (either directly or indirectly), whereas negative value reflect the outcomes of activities that have detrimental effects. However, we know that our stakeholders are affected in different ways: what's important for one stakeholder may not be important for another.

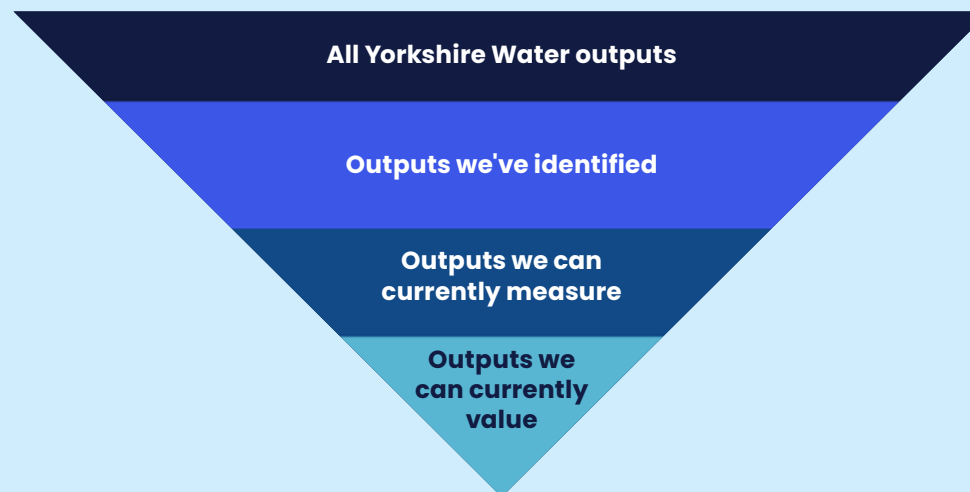
To help us better understand and prioritise our most material impacts, we've pulled together and analysed the views of our key stakeholders to identify the topics that matter most to each of them. We approached this exercise through a value-based lens but recognise that, in many cases, our long-term business performance is also dependent on each stakeholder. In other words, our business activities both impact – and are impacted by – each stakeholder group.

The results of our assessment help to make sure that we've captured our material impacts and that our reporting remains relevant and focused. Any impacts not identified as material for any stakeholder aren't included in this report. You can find more about Materiality Assessment in the Methodology Report that comes with this document.

Scope

This report focuses on the activities directly undertaken by Yorkshire Water to make sure that our assessments are consistent and comparable. Except where clearly stated, we've not included activities carried out in Yorkshire Water's supply chain or by others in the Kelda Group of companies of which Yorkshire Water is the largest.

Whilst we've worked hard to identify all our material outputs generated by our business activities, we know that this list might not be complete yet. We're also limited in our ability to measure and value our outputs in some areas at the moment. We'll look at these gaps in future and continue to update our assessment methodology in line with best practice.



Timeframe

This report covers the financial year from 1 April 2023 to 31 March 2024. Throughout this report, unless otherwise stated, we refer to each financial year by the year end date. For example, 2024 refers to the financial year that ended 31 March 2024.

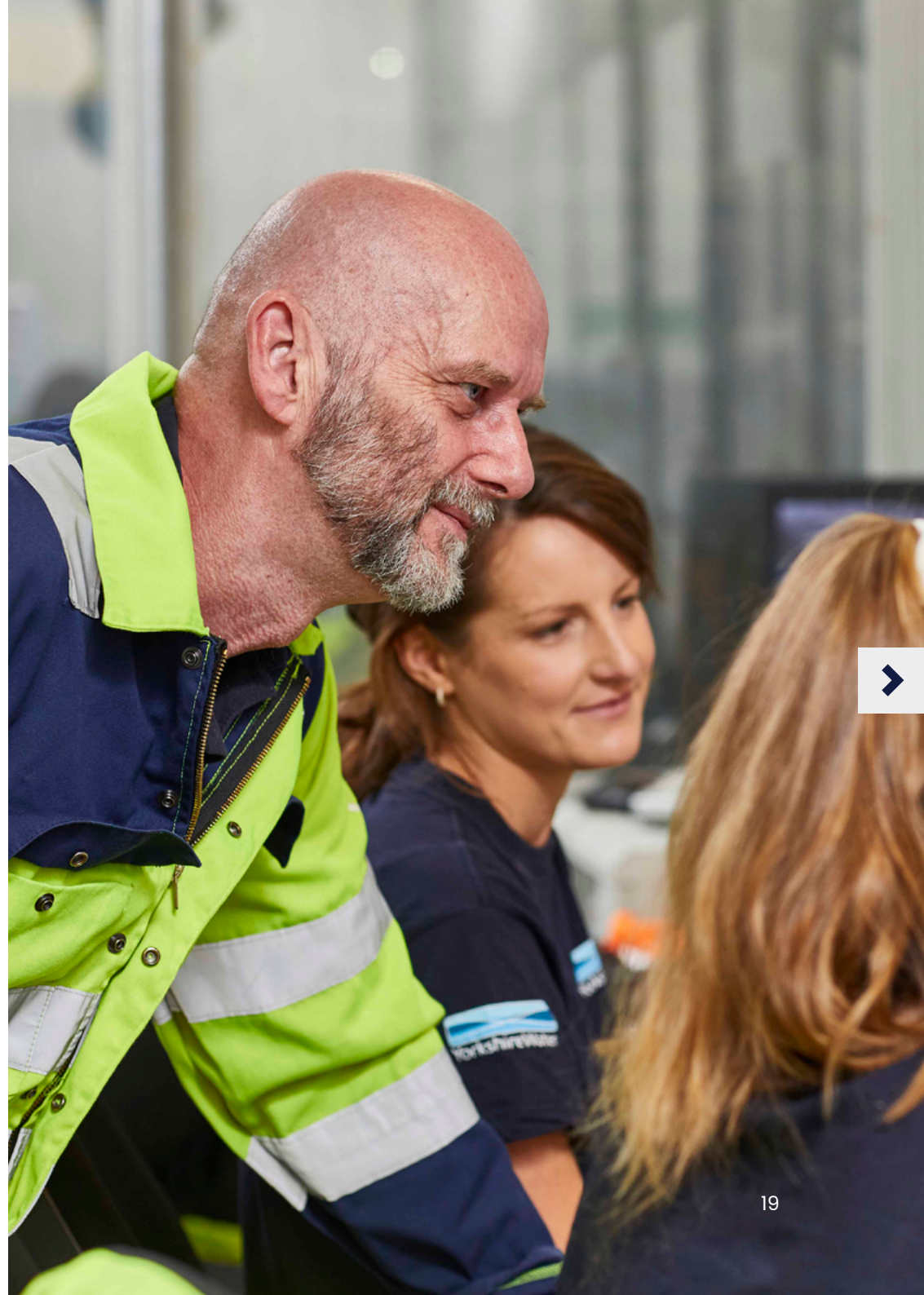
Structure

The main body of this report is split into six sections by capital type. In each section, we provide an overview of each capital and highlight why it's important to our business and our stakeholders. We then discuss our assessment findings for the year, showing how we create value and discussing our impacts in the context of our current business activities and plans for the future.

Find out more

We openly publish our work on the capitals. You can find previous reports, detailed methodologies and case studies at yorkshirewater.com/capitals

You can also find out more about Yorkshire Water in our other corporate reports – the Annual Performance Report and Annual Report and Financial Statement – at yorkshirewater.com/reports



Trusting this information

Governance

Sustainable business sits at the core of Yorkshire Water's long-term strategy. We know that we provide an essential public service and act as an anchor institution within Yorkshire, playing a key role in the health, wellbeing, and prosperity of the region.

Our Public Value Committee (PVC), which is a formal Board Committee chaired by a non-executive director, provides a focus on the social purpose and public accountability of Yorkshire Water, and is responsible for making sure that consideration of public value is embedded in strategy and decision making across the business. The PVC are accountable for reviewing and approving this report before it's published.

We've strong ethical standards of both corporate governance and business conduct to make sure we operate with honesty and integrity. Our Code of Ethics helps our colleagues and contractors make the right ethical choices and tells us about our Speak Up (Whistleblowing) policy to report anything concerning anonymously.

You can read more about our approach to corporate governance in our Annual Report and Financial Statements at yorkshirewater.com/reports

Accuracy and transparency

We want to provide accurate information you can trust. Unlike our traditional publications, the methodology that underpins this report uses innovative analytical techniques that continue to develop and evolve. To ensure openness and clarity, we use confidence grades to reflect the different levels of maturity in our data and assessment methodology.

Many of the data points that underpin this report are subject to third-party verification or assurance, either in direct relation to this work or through their inclusion in other reports published by Yorkshire Water. We've highlighted these in the accompanying data tables with further details of the other publications in which these data can be found. We're working to strengthen the quality of our data and assessment methodology as part of continuous improvement in our decision making and reporting.

It can be challenging to assign economic values to things which aren't usually expressed in monetary terms, and to quantify impacts that are not tangible or in our direct control. As a result, some of our calculations are based on assumptions and estimations. This means our figures don't yet represent a complete view of 'value'. For example, while we might express a value to Yorkshire Water of our colleagues' wellbeing in terms of changes in sickness days, this doesn't reflect the entirety of its importance to individuals and neither does it reflect the total scope of our business interests or responsibilities.

To make sure we're open and clear in this report, we've:

- Rounded our final figures so as not to imply misleading levels of accuracy.
- Used robustness ratings to show the reliability and maturity of each reported metric.
- Published data tables and our assessment methodology to accompany this report at yorkshirewater.com/capitals
- Where necessary, restated last year's figures to allow performance to be compared on a like-for-like basis. A list of restatements is provided in the accompanying Methodology Report.
- Asked for independent assurance on some aspects of our work by DNV. More information on the scope of their work and their findings can be found in the independent limited assurance report at the end of this document.

Financial capital

What is financial capital?

Financial capital is the common way in which society measures something's value. It includes those things with a cash value, such as money or stocks and shares. Financial capital cannot exist without the other five capitals; it's a way of representing parts of the value inherent in the other capitals. With the dominance of finance in traditional decision making, it's this partial representation that can lead to unsustainable approaches to decision making. This runs to the heart of the capitals concept for the need to take a broad view of value.

In this section we consider our financial value creation by showing the financial contribution we make as a business through salaries, profits, and taxes. We also add other indicators of our financial resilience including our gearing ratio, pension funds, and the proportion of our debt that's classed as sustainable.

Why is financial capital important?

For Yorkshire Water, strong financial foundations are critical to our ability to reliably maintain the region's public water and wastewater infrastructure and provide our essential services to customers and the environment, both now and in the future. For society and the economy, we play an essential role as a local anchor organisation due to our fixed regional presence and large employee base. Water and wastewater infrastructure underpin almost every section of the economy, and we create further financial benefits through our large supply chain, which you can read more about in the Social Capital section of this report. We also make a significant financial contribution to our colleagues, investors and wider society through salaries, pension contributions, the profits we generate, and the taxes we pay.



Assessment findings for 2024

Assets	Regulatory capital value £9,132m (2023: £8,715m)	Pension funds £1,037m (2023: £1,092m)	Net debt £6,647m (2023: £6,304m)	Credit rating (lowest) Baa2 (2023: Baa2)
	Gearing 70.8% (2023: 72.3%)		Share of debt invested sustainably 32% (2023: 27%)	
Outputs	Operating profit £237m (2023: £237m)	Taxes £165m (2023: £165m)	Salaries £166m (2023: £157m)	Pension contributions £15m (2023: £14m)

Financial performance

Operating profit
£237m
(2023: £237m)



The operating profit that we generated was stable this year at £237m (2023: £237m). Revenue was £82m higher than the previous year mainly due to allowed inflationary increases but was offset by increases in our operating costs. These include energy costs associated with severe weather events, contracted activities, colleague costs and an increase in Outcome Delivery Incentive penalties. We've strengthened our cost controls across the business throughout the year which has mitigated some of the additional pressures and will continue to do so in future.

Taxes, salaries, pension contributions

Taxes
£165m
(2023: £165m)



Salaries and pension contributions
£181m
(2023: £171m)



We make a significant contribution to the Exchequer each year through payment and collection of a wide range of taxes, which help to fund social security benefits for communities across the UK. Our overall tax contribution remained stable compared to the previous year at £165m (2023: £165m). We also provided jobs for over 3,700 colleagues and helped them save for a comfortable retirement, with a combined £181m paid towards salaries and pension contributions (2023: £171m). This demonstrates the value we create for our colleagues and communities as a major employer within the region.

Manufactured capital

What is manufactured capital?

Manufactured capital represents the material goods or fixed assets that are owned or controlled by an organisation. Yorkshire Water uses, maintains, and improves a vast infrastructure of pipes, pumps and treatment works to provide water and wastewater services to customers, as well as other assets such as tools, vehicles, and energy generation facilities. The value we create through our manufactured capital assets include energy consumption and waste production.



Why is manufactured capital important?

The long-term stewardship of Yorkshire's water and wastewater infrastructure is essential to the region's health and prosperity. It's our core duty to use, maintain, and enhance its water and wastewater infrastructure efficiently to make sure that communities and businesses can rely on safe and affordable water and wastewater services today and in the future.

We're investing and innovating to reduce waste from our operations to improve efficiencies and minimise environmental impacts. Our 'circular' approaches help unlock value by keeping resources in continual use and avoiding the creation of waste. For example, we use human waste to generate significant amounts of biogas, which we use to generate renewable energy and quality products for agricultural use.

We're also investing in manufactured capital to tackle leakage, reduce pollution and in particular the use of storm overflows, and improve the resilience of our business to climate change.

Assessment findings for 2024

Assets	Length of mains 32,000km (2023: 32,000km)	Length of sewers 53,000 (2023: 53,000km)	Renewable energy generation capacity 26MW (2023: 26MW)	
	Renovated, built or relined 0.35% (2023: 0.40%)	Renovated or replaced 0.05% (2023: 0.03%)		
Outputs	Change in tangible asset value £370m (2023: -£232m)	Waste diverted from landfill 95% (2023: 92%)	Energy intensity (water) 642kWh/MI (2023: 825 kWh/MI)	Energy use 767 GWh (2023: 735 GWh)
			Energy intensity (wastewater) 587kWh/MI (2023: 663 kWh/MI)	Renewable energy generated* 297 GWh (2023: 282 GWh)

* includes electricity and heat

Infrastructure assets

Change in tangible asset value
£370m
(2023: -£232m)



The value of our tangible assets increased this year by £370m (2022: decrease of £232m). This change was driven largely by additions associated with assets under construction in line with our current capital investment programme, offset to an extent by depreciation charges. We design our assets to last for many years – often decades – and this means any newly constructed assets will create long-term benefits for our customers and the environment.

Among the largest components of our fixed assets are our extensive clean and wastewater networks, which we've continued to repair or replace at rates similar to those seen in previous years by extending asset lifespans wherever possible. On average, we invested around £2m every day to maintain and enhance Yorkshire's network of pipes, pumps and treatment works to ensure we can continue to deliver our essential services on which customers depend and value.

Energy management

Avoided emissions
from renewable energy
generation

£28m

(2023: £25m)



Increased grid
resilience from export
of renewable energy

£11m

(2023: £1m)



Our total energy use increased this year to 767 GWh (2023: 735 GWh), which was driven by an increase in the size of our asset base to accommodate growth in the population we serve and meet increasingly stringent environmental compliance requirements.

To mitigate these pressures, we're targeting energy efficiency improvements across our operational activities. Pumps, for example, are the largest single source of our energy consumption and this year we completed installing 760 new pumps across 380 wastewater sites that are up to 30% more energy efficient than traditional pumps. A further benefit of the pumps is their ability to automatically detect and clear blockages, which has resulted in a 50% reduction in reactive maintenance visits to affected sites.

The amount of renewable energy we generated as heat and electricity increased to 297 GWh (2023: 282 GWh). We treat all our sewage sludge using anaerobic digesters at 13 sites across the region, which produce biogas (methane) as a by-product of the treatment process that we use to generate heat and power. In addition, we own a diverse portfolio of renewable energy production facilities including 33 solar parks, six wind turbines, and three hydro-electric turbines. This year's increase in energy generation was due to increased uptime of our combined heat and power systems, following a temporary decrease last year as a result of periodic maintenance activities.

We're working to increase energy self-generation and efficiency to help us to mitigate operational cost pressures, such as those from severe weather conditions. For example, we're switching some of our fuel use from gas oil to natural gas, electrifying our vehicle fleet, and installing solar panels at 28 operational sites.

Waste management and circular economy

Waste to landfill

-£0.3m

(2023: -£0.4m)



The total amount of waste we produced continued to decrease to 244,000 dry tonnes (2023: 269,000t) and we sent 11,000t to landfill (2023: 19,000t), resulting in a landfill avoidance figure of 95% (2023: 92%). Our primary waste streams comprise construction, repair and maintenance activity materials (70%) and digested sewage sludge (25%). Other waste streams include grits and screenings from our wastewater treatment works, treatment site general waste, and office waste.

Waste associated with construction, repair, and maintenance activities remains proportionately high as expected for this period of our current five-year business cycle that runs from 2020 to 2025, with a high level of capital projects and major maintenance programmes being finalised. We're working with our contract partners to implement more efficient construction techniques to reduce waste, such as off-site fabrication. However, the overall amount of construction waste we produce may rise in future as we embark on our largest ever environmental improvement programme during the 2025 to 2030 period.

Much of our waste can be recycled or repurposed. For example, we treat 100% of our sewage sludge using anaerobic digestion to generate biogas and renewable energy. This year we've also found new innovative uses for our waste streams to improve our wastewater treatment processes and improve visitor access at one of our recreational sites (see case studies in Manufactured and Social capital sections for further details), which has helped us create further value for the Yorkshire region.

Climate adaptation

Climate change represents a key challenge for our business. We're already seeing its impacts on our natural environment, which in turn affects our customers, the communities we serve, and the way we operate. We're committed to playing our part in tackling climate change as well as adapting to the challenges that we're facing now and are likely to face in the future.

Climate-related risks are integrated into all our long-term strategic plans. For example, our Water Resources Management Plan contains a range of intervention options, including both supply-side improvements and demand-side reductions, to maintain our resilience to future drought events. Similarly, our Drainage and Wastewater Management Plan includes investment in our wastewater network to manage the impacts of future rainfall on wastewater discharges and flood risk. For example, we're creating additional network storage capacity and using nature-based solutions to attenuate surface water run-off to slow the speed at which stormwater enters our sewer network.

We're also working to strengthen resilience to climate-related risks across our business as part of our day-to-day operations. This includes:

- Using nature-based solutions as our preferred way to deliver our services (see Natural Capital case study).
- Catchment management activities to enhance environmental processes that improve water quality and reduce flood risk, such as tree planting and peatland restoration.
- Assessing the vulnerability of our infrastructure to the impacts of flooding and, where necessary, installing flood defence measures to manage these risks.
- Providing our colleagues with carbon training courses to raise awareness and understanding of climate change within our business.
- Partnership working to tackle shared climate-related challenges facing our region (for example our Living with Water partnership to build flood resilience and develop innovative water management systems for communities in Hull and the East Riding).

More information about our climate-related risks and opportunities can be found in our Annual Report and Financial Statements.



Case study: **Taking a circular economy approach to wastewater treatment**

At our Neiley Wastewater Treatment Works near Huddersfield, we've designed an innovative new process based on circular economy principles to reduce the amount of phosphorus entering the River Holme.

The new process makes use of an iron-enriched by-product produced by the treatment process at our nearby water treatment works at Holmebridge. The presence of iron lowers the amount of phosphorus in the treated wastewater at Neiley without the need to install additional chemical dosing equipment at the wastewater treatment works.

By avoiding the need to construct additional treatment equipment, the new process makes sure that we can meet our environmental quality standards while reducing energy requirements and pressure on natural resources at a tenth of the cost of our usual treatment processes. Overall, it has led to avoided greenhouse gas emissions of 570t CO₂e and saved customers over £6.5m.

This scheme is part of a £500m investment we are making to improve river water quality by reducing the amount of phosphorus in treated wastewater at 80 sites across the region over the 2020-25 period.

Case study: **Working in partnership to build climate resilience in South Yorkshire**

Across South Yorkshire there are many properties at risk of flooding from surface water and from the public sewer network. During the November 2019 floods, over 800 residential homes and 100 businesses suffered internal property flooding in Doncaster. We're working in partnership with the City of Doncaster Council, North East Lincolnshire Council, and Anglian Water, with funding from the Department for Environment Food and Rural Affairs (DEFRA), on a project which aims to use innovative Sustainable Drainage Systems – known as SuDS – to increase flood resilience and bring communities closer to nature across South Yorkshire.

SuDS offer a more natural alternative to rainwater flowing directly into the sewers, which are sometimes unable to cope with extremely heavy rainfall. Instead, rainwater is transported into green areas to be soaked up by plants and trees or stored in ponds and drained away more slowly to a watercourse or the sewer.

The project will deliver SuDS to local communities to reduce flood risk from surface water and sewers whilst providing attractive green streets. As well as building resilience to climate change, the project will also encourage walking and cycling, enhance biodiversity, and improve community health and wellbeing.

As well as this, the project has unlocked additional research funding for weather stations and flow monitors, which will help us understand the impacts of SuDS on water levels in our sewers during heavy rainfall and inform the design of similar schemes in future.



Natural capital

What is natural capital?

Natural capital is the stock of environmental resources that people manage, use, and depend on. These natural resources provide a wide variety of 'ecosystem services', which underpin our economy and society to support human wellbeing and quality of life.

Why is natural capital important?

We rely fundamentally on water and other natural resources, yet the nature and location of our activities mean we often work in close proximity to sensitive environments with the potential to cause harm if our work is not properly managed. Our core duties involve taking water from the environment to supply customers, taking their wastewater away, and treating it for safe recycling back to the environment. These processes require large amounts of energy and chemicals produced from different forms of natural capital, which results in a substantial carbon footprint. In addition, our pipes, pumps, and other aspects of manufactured capital are all made from materials sourced from the environment.

We're a large landowner with an estate covering around 28,000 hectares. We own and manage this land with our farm tenants and other partners to protect sources of water, while also creating further benefits for natural flood management, recreation, farming, wildlife, and carbon storage. We also work closely with many other landowners and stakeholders to safeguard water sources on catchment land we do not own ourselves. Understanding how natural and human landscapes, habitats and processes interact, and how we can preserve and enhance them for future generations, is critical for the sustainability and resilience of our business.



Assessment findings for 2024

Assets	Land ownership 28,000ha (2023: 28,000ha)	Total water available for use 1,651 MI/day (2023: 1,654 MI/day)	Bathing waters 19 (2023: 20)	Land carbon stock 2,100,000t (2023: 2,100,000t)
	Land under Beyond Nature™ schemes 10,500ha (2023: 7,700ha)	Environmental performance assessment rating 2 star (2022 calendar year: 3 star)		
Outputs	Abstraction 480,000MI (2023: 480,000MI)	River improved 64km (2023: 4km)	Pollution incidents 137 (2022 calendar year: 117)	Greenhouse gas emissions[^] 211kt CO₂e (2023: 207kt CO ₂ e)
	Per capita consumption 125.3 l/p/d (2023: 123.9 l/p/d)	Leakage 94,900MI (2023: 103,200MI)	Storm overflow discharges 77,900 (2023: 54,200)	NO_x and PM emissions 110t (2023: 103t)

[^] includes scopes 1, 2, and selected scope 3 emissions using location-based reporting in line with the Carbon Accounting Workbook.

Water resources management

Water leakage
-£61m
 (2023: -£62m)



The total volume of water we abstracted from the environment remained steady this year at 480,000MI (2023: 480,000MI).

We've seen continued success in reducing leakage from our clean water network to 260ML/day (2023:

283ML/day), equating to 94,000MI for the year (2023: 103,200MI), and remain on course to drive down leakage in Yorkshire by 15% between 2020 and 2025. We're using innovative measures to reduce leakage, and we recently saw the installation of 1,200 pressure reducing valve controllers on our network. These controllers allow us to remotely operate and maintain a steady, calm network throughout the day, responding to the daily fluctuations in water use and reducing the likelihood of bursts and maintaining supply to customers.

Average water consumption per head of population, known as per capita consumption, increased slightly to 125.3 l/p/d (2023: 123.9 l/p/d). This is in line with expectations because during the summer of 2022 we experienced drought conditions coupled with energy price increases, which was reflected in customers' more efficient use of water.

This year saw the publication of our latest Water Resources Management Plan, which sets out our plan to manage our water resources for the long-term, including a number of supply and demand management options that will be implemented in the future. Together, these will increase our resilience to future drought events and deliver value for Yorkshire by ensuring we can continue to provide safe, reliable water supplies for all our customers.

Wastewater management

Pollution incidents

-£28m

(2023: -£21m)



Phosphorus released to the environment

-£139m

(2023: -£112m)



We collected and treated approximately 2.2 billion litres of wastewater (2023: 1.7bn litres) every day this year from our household and business customers across the region, as well as surface water runoff from roads, roofs, and driveways. The extra flow we've had in a very wet year, where annual rainfall was 30% higher than the 1991-2020 average. This has had a significant adverse impact on a number of our performance measures compared to last year.

We saw a decline in our overall pollution performance in the 2023 calendar year, with 137 incidents compared to 117 in 2022 and five of these incidents classified as 'serious pollution'. This 17% increase in incidents was impacted by the high levels of rainfall putting additional strain on our assets. We recognise the need to improve our performance in this area and are making significant investments into reducing pollution using new technology, as well as investing to improve the resilience of those assets most at risk of failure.

We maintained our excellent performance of 99.7% treatment works compliance this year and are pleased to report that we only had one wastewater treatment works that was classified as 'failing' this year. This means we continue to be a leading performer in the industry in this area.

We've 2,190 permitted storm overflow locations. The number of permitted discharges increased by 44% this year to 77,913 discharges compared to 54,206 discharges in the previous year, driven by a combination of significantly increased rainfall in the second half of the year and an increase in the availability of our overflow monitoring systems. With rainfall and availability factored in, we've reduced permitted discharges by 13% compared to a 2021 baseline.

We're partway through a £180m investment programme, which will reduce the number of permitted discharges from a baseline of 80,346 in 2021 to 64,277 by the end of March 2025. The scope of this ambitious reduction plan delivers surface water separation, additional storage and treatment capacity, and water butt solutions across 130 of our highest spilling sites in the region. Our PR24 Business Plan also includes a further £1.4bn investment for the 2025-2030 period to further reduce discharges from storm overflows.

We understand the importance of providing near real-time data to the communities we serve, so that people can understand where and when our assets may be discharging to watercourses. Along with the rest of the industry, we introduced a map to our website in April 2024 which displays near real-time data. This had been accessed over 18,000 times between its launch and the end of May 2024.

The amount of phosphorus released to the environment from our wastewater treatment works increased this year to 3,200t (2023: 2,800). As with our other wastewater performance metrics, this increase was driven largely by the impact of increased rainfall across the region on our existing network. We know we need to enhance our assets to cope with high levels of rainfall and we're investing £500m over the 2020-2025 period to reduce the levels of phosphorus entering Yorkshire's rivers and seas in line with the Water Industry National Environment Programme (WINEP). We plan to make further investments to achieve an 80% reduction in net phosphorous loading from treated wastewater by 2038 (from a 2020 baseline), using nature-based solutions where practicable to achieve our goals to drive water quality improvements and deliver further environmental value for our region.

River and coastal water quality

Length of river improved
£9m
(2023: £1m)



Change in bathing
water status
-£7m
(2023: £3m)



Our coastal overflows operated for less than one percent of the time in the 2023 bathing season and 16 of our 19 bathing waters within our operating region were rated as Good or Excellent.

Two coastal bathing waters were ranked as poor – Bridlington South and Scarborough South. Since there are multiple potential causes of this problem, in each location we're working closely with the local authorities and the Environment Agency to understand the root cause of these ratings and what we collectively can do to resolve the situation. Where possible, we've brought forward investment at sites which may impact bathing waters and in Scarborough work is already underway.

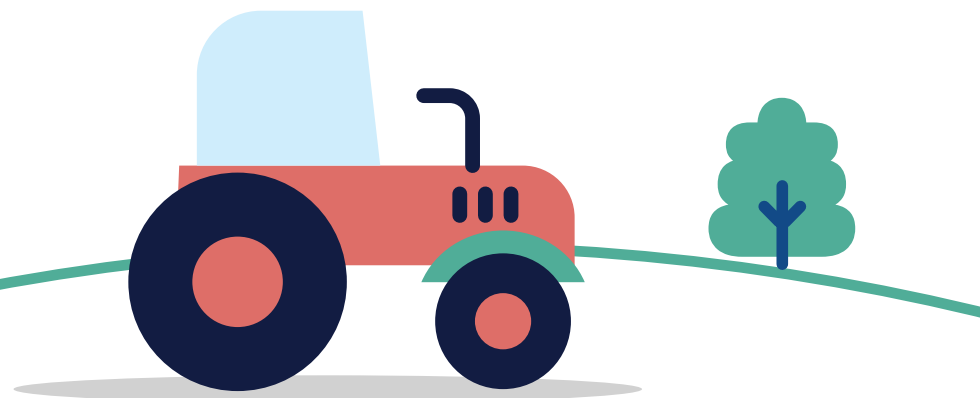
The bathing water designation at Ilkley, the first inland site in the UK, is also classed as poor. However, in early 2024 our team completed the new £15m super sewer at Ilkley, a 835 metre sewer that's already reducing discharges. In March 2024 we also shared plans to invest a further c.£60m in our networks in Ilkley.

This year we improved 64km of river (2023: 4km) to improve the water quality of freshwater habitats across the region. We've recently established a regional partnership initiative, Great Yorkshire Rivers, in collaboration with the Rivers Trust and the Environment Agency to 'open up' river systems and secure the future of our fish and other river species. Our aim is to tackle all artificial barriers negatively impacting fish populations in Yorkshire, creating value by making a significant contribution to the recovery of our native fish species and helping rivers and their communities to thrive.

Biodiversity and land management

More than two-thirds of our estate is used for agricultural purposes. We're supporting our farm tenants to make sure that we optimise the value of this land and protect the benefits it provides. Our Beyond Nature™ initiative helps farmers adopt sustainable land management practices to improve the environment such as creating new areas of woodland, reducing fertiliser inputs, and improving wildlife habitats. This year we increased the area of land under Beyond Nature™ management to 10,500ha (2023: 7,700ha) to help to protect the Yorkshire landscape for future generations.

We carry out many activities to protect habitats and enhance biodiversity across our land holdings and the wider region. The total area of land we've conserved or enhanced now stands at 11,000ha (2023: 9,800ha). We've achieved this through restoration activities at Sites of Specific Scientific Interest, Local Wildlife Sites, and farmland covered by Beyond Nature™ management plans.



Greenhouse gas emissions

Greenhouse gas emissions
(scope 1, 2 and selected scope 3; location-based)

-£72m

(2023: -£67m)



There has been a small increase in greenhouse gas emissions compared to last year, driven mainly by increased energy usage caused by pumping on our wastewater network in response to above-average rainfall. This year we've reported emissions using a location-based approach. This change reflects a strategic decision to stop the purchase of energy backed by renewable electricity guarantee of origin (REGO) and gas equivalent (RGGO) certification as a market-based adjustment to our gross emissions. This approach was taken following a decision by our regulator Ofwat to use gross (location-based) emissions rather than the market-based emissions for regulatory reporting purposes, coupled with increased market costs of REGOs and RGGOs in recent years. This means our market-based emissions will increase in the short term. However, we believe by tackling emissions at source and increasing our energy self-generation, we'll deliver a sustainable reduction in emissions in the long-term while reducing our exposure to carbon market volatility.

We've made good progress so far with our plans to reduce emissions. We're aiming to reduce as far as possible through improving process efficiency, installing low energy and low carbon retrofits, fuel switching, transitioning towards electric and more efficient vehicle fleets, increasing our energy self-generation, and designing and constructing new assets with reduced whole life carbon emissions. However, we do expect to need to use carbon offsets to mitigate a residual level of emissions once all these actions are considered and are aiming to minimise this as much as possible.

Air quality

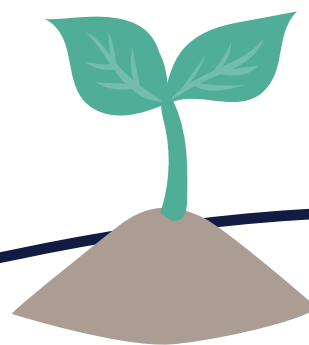
NOx and PM_{2.5} emissions

-£1.5m

(2023: -£1.4m)



Our impact on local air quality is caused by nitrous oxides and particulate matter emissions from the use of combustible fuels. This includes emissions from our vehicle fleet and from the use of generators and other equipment on our operational sites. We're transitioning away from fossil fuels towards renewable energy sources and electrifying our assets where possible, and in future this is expected to result in improvements to local air quality and also reduce our operational carbon emissions.



Case study: **Our Nature First commitment**

As part of our vision for a thriving Yorkshire, right for our customers and right for the environment, we've made a commitment called 'Nature First'. This is a commitment to pursue nature-based solutions as a preference over traditional infrastructure to deliver our services.

Nature-based solutions are rapidly being recognised as one of the most important tools to create resilient and thriving communities. By using natural processes, or mimicking natural processes, to solve a problem or deliver a service, we can reduce the need to build new infrastructure while delivering further benefits such as lower carbon emissions, enhanced biodiversity, and increased resilience to climate change.

We already have globally significant nature-based solutions including:

- Our Living with Water partnership in Hull, which is co-creating a nature-based drainage infrastructure at a city scale. This will not only reduce flood risk but also support urban cooling, regeneration, education, skills, employment, and habitat creation.
- Our partnership with Future Food Solutions, which is innovating in sustainable farming practices to protect raw water quality while also delivering the world's first arable soil carbon credits.
- Wetlands for wastewater treatment, from the UK's first Integrated Constructed Wetland that treats all flows at Clifton, to the treatment of storm flows at Hough Side and combined storm/effluent flows at South Elmsall and Clayton West.

As we embark on our largest ever environmental improvement plan for the 2025–2030 period, we'll continue to maximise our use of nature-based solutions to deliver long-term benefits for our customers and the environment.



A decorative graphic on the left side of the page. It features several thick, blue, curved lines that originate from the top left and curve downwards and to the right. At the bottom of these lines is a large, stylized red heart with a slight gradient and a shadow. The entire graphic is set against a light blue background.

Human capital

What is human capital?

Human capital relates to people's wellbeing and the value they bring to society. For an organisation, human capital represents their workforce's health, productivity, and experience. Human capital is not 'owned' by an organisation but is rather 'leased' in exchange for salaries and other employment benefits. While it can be useful to monetise the value of human capital to help inform decision making, this is not about seeing people as a commodity. Quite the opposite; by understanding the value of human capital and the things that affect this value, more effective action can be taken to protect and develop people to allow them to achieve more.

Why is human capital important?

Making sure that we've a safe, healthy, engaged, and skilled workforce is essential for us to provide our services. As well as this, as a large employer in Yorkshire, we recognise we've a role to play in social cohesion and mobility and we're committed to making sure that our diversity reflects that of the society we serve. Measuring our human capital helps us better understand the risks and opportunities driven by factors such as an ageing workforce, sickness, talent management, career development, and diversity and inclusion programmes, and in turn make effective decisions to manage these.

Assessment findings for 2024

Assets	Colleagues 3,773 (2023: 3,674)	Gender pay gap 6.6% (2023: 4.4%)	Share of colleagues declared female 27% (2023: 27%)	Share of colleagues declared BAME 4% (2023: 5%)	
	Colleague engagement 72% (2023: 63%)	Percentage of colleagues receiving a real living wage 100% (2023: 100%)	Share of senior managers declared female 28% (2023: 32%)	Share of senior managers declared BAME 3% (2023: 5%)	
Outputs	Colleague turnover 9% (2023: 14%)	New apprentices 100 (2023: 67)	Sickness absence rate 2.9% (2023: 2.8%)	Lost time incident rate 0.10 per 100,000 hours (2023: 0.15)	Colleague training 72,000 hours (2023: 65,000 hours)

BAME = Black, Asian and Minority Ethnic

Health, safety and wellbeing

Health and wellbeing programmes

£0.8m

(2023: £0.6m)



Injuries

-£0.3m

(2023: -£0.4m)



Sickness absence

-£13m

(2023: -£13m)



This year, we achieved our lowest ever lost time incident rate (LTIR) with a result of 0.10 which takes us to a world class level of safety performance. To maintain our drive to prevent injuries to our colleagues, customers, and partners, we had a planned focus this year on significant near miss incidents that have the potential, in slightly different circumstances, to cause serious injury. We were successful in reducing such incidents by 44% compared to the year before. In line with this, we've continued to hold incident review panels and learning review boards to assess the quality of our investigations and capture broader lessons to drive continual improvement.

This demonstrates that value we create through our proactive leadership to prevent injuries to our colleagues, customers, and partners.

Our sickness absence rate remained relatively low at 2.86% (2023: 2.79%). To further support the health and wellbeing of our colleagues, we've continued to train mental health first aiders and provide specialist counselling support services, through our Employee Assistance Programme and online GP services, for those colleagues who've needed support.

Engagement

Colleague turnover

-£7m

(2023: -£11m)



Colleague engagement

-£1.5m

(2023: -£6m)



We aim for an inclusive working environment for all our colleagues that supports engaged, high-performing teams. Since launching our strategy last year, we've seen our colleague engagement score increase to 72% (2023: 63%). Whilst this score means we're still below the average of 76% at other energy and utilities organisations, it marks a significant increase for us since last year and reflects the activities we've carried out to engage colleagues around our new strategy to ensure they feel valued and fulfilled in their roles. We are seeing the benefits of improved engagement through a reduction in colleague turnover rates this year compared to last, which in turn ensures we can continue to deliver the essential services that our customers value across Yorkshire.

Learning and development

New apprenticeships

£24m

(2023: £16m)



Colleague learning

£8m

(2023: £7m)



We recognise the value we can create for Yorkshire by investing in people to improve their professional development and encourage social mobility across the region. This year, 100 new apprenticeships started across Yorkshire Water (2023: 67), representing a mix of new and existing colleagues. Apprenticeships bring benefits to individual colleagues through knowledge, skills and behavioural development delivering personal and career progression opportunities. In turn, these deliver benefits for our customers through improvements in productivity, efficiency, and overall business performance.

We also increased learning hours for colleagues to 72,000 hours (2023: 65,000 hours). As well as business- and safety-critical training, we invested extra resource into leadership development to support the implementation of our 10-year corporate strategy.

Diversity, equity and inclusion

Wage inflation

£4m

(2023: -£8m)



Gender pay gap

-£3m

(2023: -£2m)



This year our mean gender pay gap increased to 6.6% favourable to male colleagues (2022: 4.4% favourable to male colleagues). While this remains lower than the national average, we know more work is needed to close the gap in the years ahead. We plan to drive down the pay gap over time, through actions such as paying greater attention to where, how and who we recruit, making sure we're aware of and reduce our unconscious biases, and making development and career opportunities available to all. We have a range of policies and practices to ensure that colleagues are fairly rewarded, one of these being our annual salary review which is underpinned by market benchmarking to ensure we offer competitive and fair rates of pay across the organisation. We are also committed to ensuring all our colleagues receive a real living wage for their work.

Case study:

Promoting equality, diversity and inclusion (ED&I) across Yorkshire Water

We're committed to providing a diverse and inclusive working environment where all our people are treated equitably. This year we launched our new ED&I strategy with three focus areas:

- Building an open and inclusive culture where our people feel connected, engaged, and free to be themselves;
- Embracing, increasing, and retaining the diversity within our workforce; and
- Equipping our colleagues with the openness, understanding and confidence to discuss ED&I.

Through this initiative, we've broadened our ED&I training for colleagues, improved the diversity data we hold, and provided opportunities for colleagues to come together to learn more about ED&I. We also now have six colleague-led networks, which are each sponsored by a member of our Executive team, to give support for colleagues on specific issues.

We also have partnerships with third-party organisations to give our colleagues access to further support and to discuss best practice in relation to ED&I. These include the Business Disability Forum, the Yorkshire Diversity Forum, the Energy & Utility Skills Partnership, and the Social Mobility Business Partnership.

With all our ED&I activities, our aim is to create and develop diverse and inclusive teams where our colleagues and partners feel they can be themselves, and are representative of the communities that we serve across Yorkshire.



Intellectual capital

What is intellectual capital?

Intellectual capital is knowledge and information: our people's skills and know-how, our systems and processes, the information we hold, and the technologies and innovations that we use and/or share with society. Intellectual capital is closely related to human capital since skills and experience are often associated with individual people. However, unlike human capital (which we assess separately), intellectual capital is assessed by looking beyond our individual colleagues to measure those intangible assets that allow our business to function efficiently. These include, for example, research and development (R&D) capabilities, information systems, and strategic partnerships with other organisations.

Why is intellectual capital important?

We use our intellectual capital through our people, systems, and processes to deliver water and wastewater services. We're always looking for ways to improve our ways of working and finding better ways to deliver our services, while keeping bills low for customers.



Assessment findings for 2024

Assets	Partnership projects* 32 (2023: 19)
Outputs	Spend on R&D £2.9m (2023: £3.5m)

* Represents projects included in our 'Working with others' performance commitment, but does not capture the full number of partnerships that Yorkshire Water are involved in at present.

Research and development

Return on R&D investment

£15m

(2023: £18m)



Spend on research and development (R&D) activities this year was £2.9m (2023: £3.5m)¹. We work in partnership with suppliers, academia, and the wider R&D community to develop new technologies and processes to deliver our services more efficiently and reduce pressure on customer bills.

Examples of R&D initiatives we're currently exploring include:

- Expanding our trials of smart wastewater networks by deploying sensors and analytics across Bradford. Smart networks help us to measure and predict network behaviour, helping to prevent service failures, maximise capacity, and create value for our customers and the environment.
- Partnering with Imperial College London to understand the technical feasibility, commercial value, and environmental benefit of recovering urine from household and business premises. Urine represents just 1% of the flow received at a wastewater treatment works but contains up to 80% of the ammonia and 50% of the phosphorus load. Recovering urine at source would have major benefits for reducing our energy and chemical consumption and resulting greenhouse gas emissions.
- Continuing to test the viability of growing insect protein on sewage sludge by assessing the fate of contaminants contained in sewage sludge and exploring the potential for commercial scale insect larvae production.
- Piloting a new sludge thickening system at Dewsbury Wastewater Treatment Works. The technology could revolutionise sludge thickening as it has no moving parts and does not require the sludge to be mixed with polymer prior to thickening.

This year we were awarded £2.3m through Ofwat's innovation Fund to trial a new gasification process for sewage sludge. Gasification destroys contaminants such as microplastics and 'forever chemicals', preventing their reintroduction into the environment, and creates biochar and syngas which have multiple, environmentally sustainable uses. If successful, the trial could pave the way for gasification to replace anaerobic digestion and disposal to land as our primary way of treating sewage sludge in future.

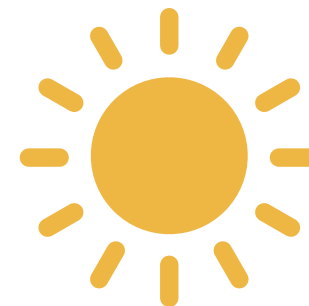
¹ Some R&D spend is capitalised and therefore also reflected in the value of our fixed tangible assets (see Manufactured Capital section).

Case study: Smart rainwater management solutions

Most of our wastewater network is known as a combined system, where runoff from impermeable surfaces such as roofs, driveways, and roads drain into a single system that takes flows away for treatment. During periods of heavy rainfall, the flows within these systems increase significantly and can put pressure on the wastewater network, resulting in the release of dilute wastewater into watercourses through storm overflows to prevent flooding of homes and businesses.

To improve how wastewater is managed across our network, we're trialling the use of smart water butts in residential areas across Wharfedale to help slow the rate at which water enters our wastewater network during storm events. These slowly drain down in advance of forecasted heavy rainfall, giving more capacity to hold back rainwater and reducing the risk of the wastewater system becoming overwhelmed.

Ongoing monitoring is in place to monitor the impact that capturing this water has on the system, so that the benefits can be measured and understood. If proven to be effective, this may lead to further similar initiatives being delivered at scale in the future to provide long-term benefits for our customers and the environment.



Social capital

What is social capital?

Social capital is the value of an organisation's relationships with people, society, and other organisations, and the trust placed in it by others. It also relates to the impacts that an organisation can have on people and society; for example, by providing a valuable service, through contributions to charities and the local community, or by providing publicly available recreational and learning opportunities.

Why is social capital important?

As a private company providing a public service, our social capital is essential – our 'social licence' to operate is just as important as our legal one. Ensuring strong levels of trust is a priority for us at a time when public confidence in the water sector has declined in recent years. We focus on this by providing our customers with the high-quality services they expect and deserve, looking after those in vulnerable circumstances, and setting ourselves challenging targets to improve outcomes for the Yorkshire region. We also work to improve the wider value we generate for society, such as through our public education programme and by working in partnership with other organisations in the region to tackle the shared challenges we face together.



Assessment findings for 2024

Asset	Public recreational sites 52 (2023: 52)	Households served 2.3m (2023: 2.3m)	Customers on PSR 213,000 (2023: 109,000)	Suppliers used 1,100 (2023: 1,200)
		Customer experience score 76.54 (2023: 78.25)	Awareness of PSR 50% (2023: 51%)	Customer trust 80% (2023: 88%)
Outputs	Recreational site visits 2.8m (2023: 2.8m)	Drinking water contacts 8.9 per 10,000 population (2023: 10.2 per 10,000 population)	Customers financially supported 124,000 (2023: 95,000)	Local employment opportunities created in our supply chain 2,100 (2023: 1,800)
	Recreational health benefits 336 QALYs (2023: 336 QALYs)	Internal sewer flooding incidents 574 (2022 calendar year: 630)	External sewer flooding incidents 5,873 (2022 calendar year 5,375)	Percentage spend with local suppliers 35% (2023: 37%)

PSR = Priority services register
QALY = Quality adjusted life years

Access and affordability

Social value of financial support for customers

£6m

(2023: £4m)



Some of our customers lead very difficult lives with unique needs and circumstances that make them more vulnerable than others. These include people with disabilities, long-term illnesses, or caring responsibilities. Our Priority Services Register (PSR) is free for customers to sign up to and helps to inform us about their circumstances so that we can provide services to support them. This year we increased the total number of customers on our PSR to 213,000 (2022: 109,000). We've also introduced a number of initiatives this year to support customers with a broad spectrum of help. We have established robust signposting practices across our billing function to make sure that customers are referred to additional help, including areas beyond water affordability, to ensure our customers receive the priority services they need. These include providing bills in different formats, such as Braille, and making sure that priority access to water supplies for individuals with young children, serious illnesses, and other needs.

Households across the country have continued to be affected by the cost-of-living crisis throughout the year. Our customers have faced growing bill affordability issues as household expenses have risen. We try to make sure that our bills remain affordable for customers; this year our average combined bill increased to £467 (2023: £446), which translates to an average daily cost of 54 pence per household customer. We provided financial support to 124,000 customers (2022: 95,000) to make their bills more affordable through mechanisms such as our social tariff options, debt schemes, and domestic water meters.

This year, we joined forces with TellJo, an organisation that helps businesses understand the reasons why customers have missed payments and uses award-winning technology to signpost additional support that is available to them, helping to build resilience and wellbeing for customers. We're using the technology to improve the support provided to customers, including offering payment arrangements, the option to sign up to debt or support schemes and to register to be on our Priority Services Register.

Our ambition in the next five years is for a further step-up in the help we provide for bill affordability. In our PR24 Business Plan for the 2025-2030 period, we've committed to providing:

- Financial support for half a million customers over the five-year period;
- Water bill support for 280,000 customers; and
- £250m worth of financial support across our suite of help schemes.

Together, these commitments demonstrate our ambition to create social value to our customers across Yorkshire by ensuring they receive the support they need to access our services.

Service quality and safety

Health benefits of providing a public water supply compared to a private supply

£17m

(2023: £16m)



Drinking water quality in the UK is among the highest in the world and providing safe, clean, reliable water supplies and effective sanitation for our customers plays a key role in safeguarding public health, social wellbeing, and economic development across our region.

We measure our overall water quality performance against water quality tests using a measure known as the Compliance Risk Index (CRI), which was designed by the Drinking Water Inspectorate and is used to illustrate risk arising from treated water compliance failures (a lower score is better). This year, our CRI score increased to 9.27 (2023: 4.61). This was mainly due to the risk at one water treatment works where we're currently installing new chemical dosing and refurbishing treatment processes to make sure water of the highest quality continues to be supplied. Excluding this one site risk, our 2024 performance would have been an improvement on the 2023 score at 4.01.

Our Drinking Water Contacts metric, which measures the number of times we're contacted due to the look, taste, or odour of drinking water, decreased to 8.9 per 10,000 customers (2023: 10.2). This was driven by our expanded trunk main cleaning programme, and improvements made to our risk-based flushing programme on our smaller pipes. This level of performance promotes confidence and trust in the services we provide and is valued by customers across the Yorkshire region.

On our wastewater network, the number of internal sewer flooding incidents dropped this year to 574 (2023: 630), but the number of external sewer flooding incidents increased to 5,873 (2023: 5,375). We recognise the impact sewer flooding has on our customers and are committed to driving down rates of sewer flooding in future. However, both internal and external sewer flooding performance has been challenging in 2024, with significant weather events and above average rainfall impacting our performance.

Improving our performance in relation to wastewater discharges is a key priority for our business and we're investing in multiple ways to make improvements quickly. For example, we're making investments into new technology such as the Vapar system, which uses CCTV pipe inspection software to help prioritise work in the sewer network, and the V-scout system which digitally surveys the condition of manholes to help build a clearer picture of asset health.

We're also continuing to transform our planning, scheduling and response processes within our sewer network department as part of our modernisation programme. With metrics showing improvements to productivity, response and resolution times, this new model office approach, supported by new and improved systems, is being rolled out across the region throughout the 2024 calendar year.

Ethics and human rights

It's a fundamental policy of Yorkshire Water to conduct our business with honesty, integrity and in accordance with the highest standards of ethics, equity and fair dealing. All our colleagues complete mandatory online training to make sure that everyone understands these ethical standards.

We take steps to make sure there is no slavery or human trafficking within our organisation or our supply chains and our accreditation by the Living Wage Foundation makes sure that all colleagues are paid over and above statutory wage levels. We also embed ethical contractual requirements throughout our supply chain and check compliance through a range of assurance controls, which include a statutory clause in all relevant supplier contracts to ensure that qualifying contractors receive at least the National Living Wage, including where working for a subcontractor.

We continuously review our policies and procedures on this topic, seeking opportunities to refine and improve these to mitigate risks and reflect best practice. We're a proud member of Utilities Against Slavery, a collaborative forum for energy, water, and gas providers in the UK with the goal of eradicating modern slavery from the utilities sector. More information about our approach to modern slavery can be found in our annual statement, at yorkshirewater.com/about-us/our-policies/modern-slavery-act

Sustainable procurement practices

Local employment opportunities
created in our supply chain

£73m

(2023: £59m)



We spent over £1.1bn this year on goods and services, playing a key role in contributing to the local economy. This year we continued to support businesses across Yorkshire with 35% of our spend going to local suppliers (2023: 37%), which includes both large suppliers headquartered in Yorkshire as well as small- and medium-sized enterprises. We estimate this spend has created over 2,000 local employment opportunities in our supply chain, demonstrating the wider economic and social value we generate for the region through our work.

Sustainability considerations now form an increasingly important part of our procurement decision making. We're working with our suppliers to spot shared opportunities to address existing and emerging social, economic, and environmental challenges and drive positive change across our value chain. Our Sustainable Procurement Code details the expectations and requirements on our suppliers and contractors when undertaking work on our behalf.

Through our partnership with the Supply Chain Sustainability School, our colleagues and suppliers have access to training courses and workshops to support skills development and education around key issues ranging from carbon management to combatting modern slavery. We're also exploring how to grow/improve the diversity of our supplier base more by giving extra support, such as immediate payment terms, to small- and medium-sized enterprises and community organisations, making it easier for them to engage with us commercially.

Public education

Public educational programmes

£1.1m

(2023: £0.7m)



We carry out a range of virtual and in-person activities to raise awareness of the value of water. This year saw 37,000 participants in our free education programmes (2023: 26,000), which includes visitors to our education centres as well as visits we carry out to schools across the region. Our education programme helps us to engage with our customers from an early age, helping them to learn about safety around water, how they can help support us in doing the right thing for the environment, as well as introducing them to new opportunities for their own futures. This encourages social mobility and demonstrates the value we generate for our younger customers across Yorkshire.

Recreational opportunities

Amenity value of
recreational visits to
Yorkshire Water sites

£7m

(2023: £7m)



Health benefits of
recreational exercise on
Yorkshire Water sites

£27m

(2023: £25m)



We provide public access to our 52 recreational sites across Yorkshire, which are visited by millions of people each year for exercise, wildlife watching, beautiful natural views, and access to open spaces and fresh air. Our recreational sites are supported by a dedicated team of countryside rangers to engage with visitors and promote public safety, access and conservation. By providing access and recreational opportunities at our visitor sites, we create value for Yorkshire by supporting the health and wellbeing of our customers across the region.

Case study: Improving visitor accessibility at Tophill Low

Part of our Tophill Low Nature Reserve can now be observed by wheelchair users for the first time after recycling 25,000 tonnes of soil and other surplus material was used to create new and improved visitor accessibility.



The material, which would otherwise have ended up in landfill, also created new habitats, and came from a £31m project to improve drinking water quality at the nearby water treatment works.

By reusing leftover soil rather than disposing of it as waste, we could build two accessible viewing platforms with a new hide carefully planned to deliver a safe and comfortable viewing. An amphibian pond, which has already been colonised by the great crested newt, has also been created. We've also added a hibernaculum planted for the reserve's grass snakes and a bat roost tunnel built from recycled materials extending beneath a new hill.

As well as this, the derelict former social club and visitor centre on the reserve was converted into project offices. These will be returned to the reserve as a new volunteering hub on completion of the project, leaving a lasting legacy for the site.

Altogether, this project saved around 25,000 tonnes of waste ending up in landfill and avoided nearly 3,000 lorry movements through local villages, saving customers around £3m in removal and disposal costs and creating environmental and social value for Yorkshire.

Case study: Raising awareness of the value of water in local communities

Our public educational programme targets children and young people who are passionate about the natural world and want to do their best to protect it. This year we launched a new LEGO education-based programme to raise awareness of the causes of sewer blockages and highlight what should and shouldn't be flushed down the toilet or poured down the sink.

In a first of its kind for the water sector, children work in teams and put their science and engineering skills to the test to build a LEGO robot and program it to travel around a map, tackling blockages caused by wet wipes incorrectly flushed down toilets and fats, oils and greases disposed of in sinks rather than kitchen bins.

By providing interactive and engaging education sessions, we aim to influence customer attitudes and behaviours in local communities and reduce the number of blockages we deal with on a daily basis.

We'll start by focusing the sessions on schools near some of our major infrastructure projects and within areas where blockages are a known issue and intend to roll out the programme further in the future.



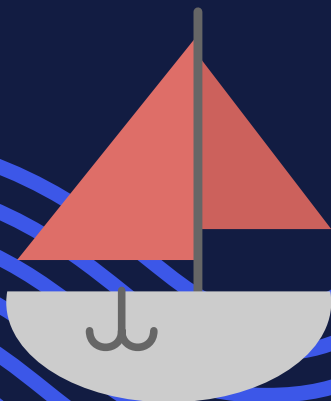
Conclusion

This report assesses the outputs of Yorkshire Water's business activities and the value we generate for our stakeholders during the 2024 financial year. Our assessment demonstrates areas of strength over the past year, as well as highlighting other areas where performance improvements are needed in future.

Although we know that our assessment doesn't necessarily represent a complete view of 'value', our findings suggest we make an overall positive contribution for most stakeholders, with the exception of our impacts on the environment that we plan to reduce during the 2025-2030 regulatory period.

For example, we're investing in biological, chemical, and nature-based wastewater treatment solutions to reduce phosphorus loading from our works by 634kg/day from 2025-2030, with more reductions planned for future years. We're also driving down carbon emissions by reducing process emissions, electrifying our fleet, optimising energy and chemical usage, and deploying renewable technologies as part of our drive towards net zero.

We'll continue to report on our progress and performance in future *Our Contribution to Yorkshire* reports. To enable scrutiny and build trust with interested parties, we'll also keep providing the underlying data and methodology that support our reporting.



Get in touch with us

**We welcome your feedback, questions,
and ideas about this report.**



**Please email us at:
sustainability@yorkshirewater.co.uk**



Appendix 1. Independent limited assurance report

to the Directors of Kelda Group Limited

DNV Business Assurance Services UK Limited ("DNV", "us" or "we") were commissioned by Kelda Group Limited to provide limited assurance to Yorkshire Water Services Limited ("Yorkshire Water") over Selected Information presented in Yorkshire Water's Our Contribution Report 2024 (the "Report") for the reporting year ended 31 March 2024.

Our observations and areas for improvement will be raised in a separate report to Yorkshire Water's Management. These observations do not affect our conclusion set out above.

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.

Selected Information

The scope and boundary of our work is restricted to the selected metrics included within the Report from 1 April 2023 to 31 March 2024 (the "Selected Information"), listed below:

Metrics	Reported value	Unit
Spend on research and development (R&D)	2.9	£m
Percentage spend with local suppliers	35	%
Total colleague hours spent on training	72,000	Hrs
Number of new Yorkshire Water apprentices	100	No.

To assess the Selected Information, which includes an assessment of the risk of material misstatement in the Report, we have used Yorkshire Water's Methodology Report (the "Criteria"), which can be found here yorkshirewater.com/capitals/

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 Yorkshire Water's website for the current reporting period or for previous periods.

Standard and level of assurance

We performed a limited assurance engagement of specified data and information using the 'Greenhouse Protocol – A Corporate Accounting and Reporting Standard' (revised 2015) and 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.

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 Yorkshire 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 has been appropriately measured, recorded, collated and reported;
- Reviewing that the evidence, measurements and their scope provided to us by Yorkshire Water for the Selected Information is prepared in line with the Criteria;
- 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.

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 Yorkshire 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
29 November 2024

Holly Wallis-Copley
Lead Verifier
DNV Business Assurance
Services UK Limited

Paul O'Hanlon
Technical Reviewer
DNV Business Assurance
Services UK Limited

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 Yorkshire 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.

Inherent limitations

DNV's assurance engagements are based on the assumption that the data and information provided by Yorkshire 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.

Responsibilities of the Directors of Yorkshire Water and DNV

The Directors of Yorkshire 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 Yorkshire 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.

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.

Thank you for reading



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Registered in England and Wales No.02366682

yorkshirewater.com



YorkshireWater