

Annual Performance Report 2021/2022

Published July 2022



YorkshireWater

Navigating this document

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

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There are also many other clickable links within this document which we've made easy to spot by underlining and **highlighting** them in blue. If you click on one of these links, but then wish to navigate back to the page you were viewing previously, simply click the 'Back' button at the top of the page.

Reading our APR

Our Annual Performance Report (APR) is designed to be read on screen using a PDF viewer. You can print our APR if you prefer, but because it's a long document you may wish to print in black and white and use the contents page to print the sections you wish to read.

Definitions

We have included definitions on the same page as the content to make it easier to understand. You can find our full regulatory glossary on our reports webpage:



Welcome to our 2021/2022 Annual Performance Report

This is our second Annual Performance Report (APR) for Asset Management Period (AMP) 7 and it covers the period from April 2021 to March 2022. It tells our customers and stakeholders about the progress we are making to deliver our commitments as well as providing information on our service levels, cost information and financial performance. This Annual Performance Report provides information required by Ofwat (the Office of Water Services), the body that regulates the water sector to protect customer interests.

Definition

AMP

An 'Asset Management Period' is the term given to the five-year period covered by a water company's business plan. AMP1 refers to the first planning period after the water industry was privatised and this covers the period from 1990 to 1995. We are currently in AMP7, which covers 2020 to 2025 and we report on our performance in the financial year 2021/2022 in this APR.



Get in touch with us

We welcome your comments and feedback on our Annual Performance Report. If you have any questions, comments or would like to give us feedback on our Annual Performance Report or any of our other publications please get in touch with us using the contact details on this page.

Please do not hesitate to get in touch if you would like a paper copy of this report.

You can contact us in the following ways:



Email us

 publicaffairs@yorkshirewater.co.uk



Sending comments via our website link



Facebook message us



Or posting them to us

Regulation Department,
Livingstone House, Chadwick Street,
Leeds, LS10 1LJ



Contents

We've created colour-coded sections to help you to navigate this report easily. Just click on the section you are interested in on the contents page, and it will navigate you to that section.

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3 How we're progressing with our performance commitments	35
In this section, we explain what our performance commitments are, how we are performing against them, a summary of the assurance activities we have completed for the information in this report, and the steps we are taking to improve trust in our information.	
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5 Meeting our licence conditions	312
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7 Transactions with associates and the non-appointed business	377
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Finding important information in our annual performance report

This report is quite long. We pack this report with useful and important information. So, to help you find what you're looking for, we created a list of the highlights from each section.



1. Introduction

Foreword

Supporting publications

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About us



2. Statements from our Board

Board statement on accuracy and completeness of data and information

Board statement on company direction and performance



3. How we're progressing with our performance commitments

Our assurance process

Our assurance plan for the annual performance report

Our data improvement plans

Introduction to our performance commitments

Outperformance and underperformance

How did we perform against our performance commitments?

Summary of our overall financial performance

The below measures are a consolidation of the financial metrics measured by Board and investors used by long-termists to form a view on our financial performance

	2019	2020
Operating income		
Operating income	\$2,020	\$2,040
Operating income margin	20.2%	20.4%
Operating expenses		
Operating expenses	\$1,810	\$1,810
Operating expenses margin	18.1%	18.1%
Operating profit		
Operating profit	\$210	\$230
Operating profit margin	2.1%	2.3%
Operating assets		
Operating assets	\$1,810	\$1,810
Operating assets margin	18.1%	18.1%
Operating liabilities		
Operating liabilities	\$1,600	\$1,580
Operating liabilities margin	16.0%	15.8%
Operating equity		
Operating equity	\$210	\$230
Operating equity margin	2.1%	2.3%
Operating income		
Operating income	\$2,020	\$2,040
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Operating equity	\$210	\$230
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Operating income margin is calculated as Operating income divided by Operating assets. Operating expenses margin is calculated as Operating expenses divided by Operating assets. Operating profit margin is calculated as Operating profit divided by Operating assets. Operating assets margin is calculated as Operating assets divided by Operating assets. Operating liabilities margin is calculated as Operating liabilities divided by Operating assets. Operating equity margin is calculated as Operating equity divided by Operating assets.

Statement on sufficiency of financial resources and facilities

Leadership

Our board composition is more diverse than the industry average.

- 1. Diverse board members
- 2. Diverse board members
- 3. Diverse board members
- 4. Diverse board members

Guarantees or other forms of security by the appointee

Corporations generally have no obligation to provide any form of security to the appointee. However, the appointee may require the corporation to provide some form of security to protect the appointee's interests. This may be in the form of a guarantee, a security interest in the corporation's assets, or a security interest in the appointee's interest in the corporation. The appointee may also require the corporation to provide some form of security to protect the appointee's interests in the corporation's assets.

As discussed above, the appointee may require the corporation to provide some form of security to protect the appointee's interests. This may be in the form of a guarantee, a security interest in the corporation's assets, or a security interest in the appointee's interest in the corporation. The appointee may also require the corporation to provide some form of security to protect the appointee's interests in the corporation's assets.

Transfer of any corporation tax group losses by or to the appointee

Transferor	Appointee	Transferor's Taxable Income	Appointee's Taxable Income	Transferor's Taxable Income After Transfer	Appointee's Taxable Income After Transfer
100%	100%	100%	100%	100%	100%
80%	80%	80%	80%	80%	80%
60%	60%	60%	60%	60%	60%
40%	40%	40%	40%	40%	40%
20%	20%	20%	20%	20%	20%
0%	0%	0%	0%	0%	0%

4. Pro forma tables

Financial auditor's opinion

Statement as to disclosure of information to auditors

Statement on differences between statutory and regulatory accounting guidelines (RAG) definitions

Tax strategy for the appointed business

- An accounting policy note for price control units
- Note on revenue recognition
- Note on capitalisation policy
- Note on bad debt policy
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5. Meeting our licence conditions

Statement on sufficiency of financial resources and facilities

6. Board, leadership, transparency and governance

Our company structure

Our Board of directors

Statement on dividend policy
for the appointed business

Statement on executive pay and performance

7. Transactions with associates and the non-appointed business

Loans by or to the appointee

Dividends paid to any associated company

Guarantees or other forms of security by the appointee

- Transfer of any corporation tax group losses by or to the appointee**
- Supply of any service by or to the appointee**
- Transfer of any asset or liability by or to the appointee**

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Foreword

Welcome to our 2021/2022 Annual Performance Report which covers the period from April 2021 to March 2022.

It tells our customers and stakeholders about the progress we are making to deliver our commitments as well as providing information on our service levels, cost information and financial performance. This Annual Performance Report provides information required by Ofwat (the Office of Water Services), the body that regulates the water sector to protect customer interests.

In April 2020 we started AMP7 – this is our business plan for the period 2020–2025. Our AMP7 plan sets out how we will maintain and improve water and wastewater services in Yorkshire to make sure they are resilient and sustainable.

For AMP7, we have 44 performance commitments. In this report you will be able to see how we are doing in terms of delivering on our performance commitments. Though there is always more to do and areas where we need to improve, we are proud of our progress to date in AMP7.

We hope that you will find this report useful and engaging.

We always value your feedback on how we can improve our annual reporting – you can find details about how to contact us on [page 4](#).

Chair's statement

This is the first annual performance report (APR) since I took over as Chair of the company in September 2021. Since joining the company last year, I have visited as many sites as possible and have been very impressed with the commitment which our colleagues show in delivering our service to customers, particularly throughout the difficult times of the last two years.

I have joined the company in a period in which the environmental performance of water companies and regulators has come under considerable scrutiny. This scrutiny has come about because much more information is now publicly available showing how our wastewater networks operate and their impact on the environment. This increase in transparency is welcome, even if it has at times been uncomfortable for all of us in the sector. It is however now clear that engineering practices, such as the combining of foul and surface water drainage, are no longer acceptable to the public.

We need to recognise this and plan to invest to address these concerns in the years ahead. It is important that companies, government, and regulators work closely to find an affordable method of delivering what the public expects, whilst at the same time also financing the steps we need to take to move towards net zero and improve our own climate resilience. The Board of Yorkshire Water takes its environmental and compliance responsibilities seriously. We have processes in place through our Audit and Risk and Safety, Health, and Environment Committees to assure us of the measures taken to achieve legal compliance in the company and also monitor environmental performance closely.

Yorkshire Water has been an industry leader in operational and financial transparency, and we have recently published a plan which sets out what we intend to do to strengthen the trust of stakeholders and the public and how we intend to work with them to improve water quality in Yorkshire's rivers and coasts.

Rivers and coasts do not respect either organisational or geographic boundaries and thus, this plan has to be based on partnership with local authorities, agriculture, landowners and community and environmental groups across Yorkshire if it is to be successful.

Our strategic vision is based on three principles: service, resilience and growth. By transforming our operational efficiency, we aim to achieve a step change in the level of service we provide to customers and at the same time secure the resilience of the business, in particular to the impacts of climate change. Sustainability is key to resilience as it is self-evident that the more sustainable we are in the way in which we operate, the more resilient we will be in both the short and long term.

If we deliver these improvements in service and resilience, we will have earned the right to look for opportunities to grow our asset base and recognise that, in future, growth opportunities are most likely to come in partnership with other Yorkshire institutions with similar objectives. We also look forward to working with Iain Coucher, the new Chair of Ofwat, and his team, and with the incoming Chair of the Environment Agency (EA) to evolve a fresh approach to environmental and economic regulation which will deliver against public expectations in the longer term.

In April, we announced that after nearly 12 years with the company and close to three years as Chief Executive Officer (CEO), Liz Barber would retire from the Board on 6 May 2022. Nicola Shaw, most recently UK Executive Director for National Grid, was appointed as CEO to succeed Liz and joined the company on 9 May 2022. She was previously CEO of High Speed 1 and a Director of First Group, and is currently a Non-Executive Director of International Airlines Group. Liz first joined Yorkshire Water in November 2010 as Group Director of Finance and Regulation, having previously been a Senior Partner at Ernst & Young where she led the firm's national water team. Liz later became Group Director of Finance, Regulation and Markets and was appointed CEO in September 2019. Liz made a huge contribution to the company in both her leadership roles. As CEO she led us through the pandemic and dealt very effectively with the challenges this caused for both colleagues and customers. On behalf of the Board, I would like to thank her for all she has done and wish her well for the future.

We were delighted to be able to appoint Nicola Shaw as CEO. She brings extensive experience in regulated infrastructure businesses with a high public profile and has an excellent track record in driving efficient delivery whilst also improving customer service and staff engagement.

I would like to thank the Board, leadership team and all colleagues at Yorkshire Water for their work throughout a year which involved considerable economic volatility, the details of which are set out in the Chief executive's report.



Vanda Murray

Chair

15 July 2022

Chief Executive's report

I joined Yorkshire Water on 9 May 2022 and it is already clear the Yorkshire Water team has done a great job maintaining a resilient and excellent service to our customers throughout the pandemic and the three severe weather events experienced throughout this year. Yorkshire Water is determined to be a great partner in the county – we provide the lifeblood of society bringing clean water to every home and business and then taking away wastewater and processing it to minimise our effect on the environment.

However, over the past year, our performance has not always met the standards we set ourselves in areas such as internal sewer flooding, water supply interruptions, and unplanned outage and we need to do more to control our cost base. We took immediate action on each challenge as it arose, but we are also clear that there is a need for a longer-term change in the way we operate and manage the company.

Our transformation programme, which will deliver operational efficiency and customer service improvements into the next Asset Management Period (AMP), is making good progress. The target operating model has now been finalised and work on a new organisational design is well underway. The two main change programmes – dynamic asset maintenance (DAM) and integrated planning, scheduling and logistics (IPSL) – are now underpinned by realistic data on benefits realisation and the proofs of concept are now live. Colleague engagement, which is essential to ensure effective implementation, is about to commence.

Delivering for customers

Our work to implement the customer promise has made good progress and our bespoke training has now been rolled out to over 1,500 colleagues at Yorkshire Water and our service partners. This training will ensure that all colleagues understand their role in delivering the promise in their day-to-day work.

There has been some positive performance on both the clean and wastewater sides of the business, despite the climate volatility experienced, especially in the last quarter of the year. You can read more about what we are doing to adapt to climate change in the Love our environment section of our ARFS.

We have completed leakage surveys on all of our trunk mains and this has made a material contribution to the achievement of our leakage reduction target. Our Smart Water Network pilot in Sheffield has also progressed well, and we have reduced leakage in the area. Our performance is detailed further in our Being great with water section of our ARFS.

Despite this, there have been a number of substantial bursts in water mains which have led to an increase in our unplanned outage figures. These outages were permitted within our performance commitment target, but were higher than we targeted in our business plan. These bursts, combined with the impact of Storm Arwen, also led to an increase in our water supply interruptions which ended higher than our business plan target.

We have achieved business plan targets for treatment works compliance, asset health and pollution incidents. Along with other water and sewerage companies, the performance of our wastewater assets has come under significant scrutiny during the year. At the beginning of March, we received notification of a request for information from Ofwat, made under section 203 of the Water Industry Act. This request has been made as part of the regulator's industry wide investigation into flow to full treatment (FFT) at wastewater treatment works. We have complied fully with the request and will continue to cooperate with Ofwat in the conduct of its investigation. Compliance with FFT has already been the subject of considerable management attention and in March 2022 we set up a task force within the wastewater team to ensure that all compliance risks are properly managed.

Our performance on external and internal sewer flooding has also been impacted by the storm events of early 2022. Despite this, we met our business plan target for minimising external flooding, but did not meet our targets for internal flooding.

Unfortunately, our rating in the Environment Agency's environmental performance assessment (EPA) has fallen from four stars to two stars. There are two factors behind this: first, a changing methodology with stricter performance measures and secondly an increase in the number of what the EA has classified as serious pollution incidents. The change in methodology has led to a fall in the ratings of a number of water companies and as a result there are now five two star companies and two one star companies. We are disappointed at this result and remain absolutely committed to improving our environmental performance.

The delivery of our capital programme has made excellent progress in the year and all our regulatory commitments have been delivered in year two of the AMP. Financial performance on the programme is also strong with the year ending in a net capital outperformance position.

However, the tightening of drinking water and river water quality requirements set out by our regulators is increasing pressure on both our cost base and on our ambition to achieve net zero operational emissions by 2030. We have also experienced growing affordability and wider cost pressures, in particular with increases in materials, energy, and fuel prices.

Working with Yorkshire

As an anchor institution in Yorkshire, we see collaboration with the county's institutions as an important part of how we go about delivering our services. Where possible, we convene partnerships with stakeholders so that we can pool planning and resources to tackle issues we have in common such as flooding, resilience and climate change.

The partnership in Hull and East Riding, Living with Water, is now mature and has brought together Hull City Council, the East Riding of Yorkshire Council, Yorkshire Water, and the EA to plan both a strategic response to flooding and resilience as well as a joint operational response to incidents. Living with Water has now moved beyond the initial collaboration phase and is into project delivery with five sustainable, blue-green projects shortly to be delivered in the region.

In South Yorkshire, the Connected by Water partnership focuses on the Don catchment and involves the councils of Barnsley, Doncaster, Rotherham and Sheffield, as well as the Mayoral Combined Authority, Yorkshire Water and the EA. The flooding in 2019 was the catalyst for the creation of Connected by Water and the partnership has made very quick progress since its inception last year. In January this year the partnership launched its action plan for public consultation. This plan has four themes: responding to the climate emergency; SMART investment; technology and operational management; and engagement and community resilience.

Early actions emerging from the plan for early implementation include a source-to-sea nature-based solutions programme for the Don Catchment with the first of three projects focusing on the Upper Don.

This will involve interventions to slow the flow of water on Sheffield's hills such as peatland restoration and the creation of ponds and wetlands. Another early deliverable is the creation of a South Yorkshire flood risk investment tool, which will bring together flood risk data and evidence from across the region to ensure that future investment provides the maximum flood risk benefit.

We are particularly pleased to have strong engagement from the Yorkshire Leaders Board in the development of our priorities for our business plan for the next periodic review covering the period 2025 to 2030. The Leaders Board brings together the Chief Executives of all the local authorities in Yorkshire and they are making a valuable contribution to our thinking on investment priorities for the next AMP. We will shortly be consulting with the Leaders Board and other Yorkshire stakeholders on how the whole price review process could better incorporate a strong regional voice, so that the county's priorities are considered as part of the secretary of state's strategic guidance to Ofwat.

This is very much in line with recommendations in the Government's National Infrastructure Strategy, published in 2020, which called for local and mayoral authorities to have a greater role in business planning for regulated network utilities.

River water quality

The environmental performance of water companies, particularly their impact on water quality in rivers and coasts, has been the subject of considerable attention from the public, non-governmental organisations (NGOs), Government and regulators. The main focus of this has been the use of storm discharges from combined sewer overflows and treatment works. Data from discharge monitors is now publicly available, and the frequency and duration of discharges has struck a chord with the public. There is a clear and strong demand for these to be reduced. In late March, the Government published its high-level targets for a reduction in the use of overflows and it is clear that achieving these targets will result in a substantial investment programme in, at least, the next and following asset management periods.

At Yorkshire Water, we applaud the ambition of these targets and, with the rest of the industry, have pushed for regulatory changes which will enable progress to be made. However, we have asked the Government to consider how their proposals could be improved to mitigate the differential impact on customers in the North of England. Yorkshire and United Utilities have, for historical reasons, the largest numbers of storm discharges on our networks which means that over 80% of the cost of meeting the targets will fall on our customers.

Following the publication of the targets, we consulted with environmental stakeholders in Yorkshire and ensured their views were incorporated into our response. We are also working closely with them to deliver against our own plan to improve Yorkshire's rivers, which was published at the end of April.

In late 2020, the Wharfe at Ilkley was designated as the UK's first inland bathing water. Yorkshire Water supported the application for bathing water status which came about through the hard work and tenacity of the Ilkley Clean River Group (ICRG). Improvements in river quality can only come from partnership working and we are delighted to be working closely with the ICRG and other stakeholders including landowners and farmers to develop a plan to improve water quality in the Wharfe, first in and around Ilkley and then throughout the catchment. Since the designation was granted we have been carrying out an extensive sampling programme to determine where Yorkshire Water needed to invest in its assets to deliver the necessary improvements. As a result, we are committed to spend £12m in this AMP to reduce storm discharges into the designated bathing water and to ensure that the final effluent of our plants upstream of Ilkley is treated to remove faecal bacteria.

Our customers tell us that they support further investment to reduce discharges to rivers and coasts, but we are also mindful of the extraordinary pressure many are experiencing on their household finances as a result of inflation and rising energy prices.

We are therefore working to ensure that our investment plans for the future are kept as cost effective as possible to ensure that they are affordable for customers. Balancing the public and Government desire for more investment in the environment with the need to keep bills affordable will be a significant challenge or future price reviews and, along with other water companies, we look forward to working with Ofwat to find ways of striking the right balance.

Financial performance

Our revenue has increased year-on-year by £17.4m, largely due to allowed inflationary price increases and changes in consumption. We have experienced some significant cost pressures in the year leading to operating expenditure of £876.2m (2021: £859.7m). This increase is largely due to sharp increases in energy and weather-related costs. Energy expenditure was between £1.3m and £3.5m per month higher than expected for the last six months of the financial year.

As a leadership team, we have been working hard to manage these cost pressures, with our business plan for the next financial year containing significant operating cost reduction measures. This work includes a significant focus on managing energy costs through forward contracts, further investment in solar power, and identifying renewable energy opportunities.

Looking ahead to the future

I am delighted to have joined Yorkshire Water and to be working alongside the great colleagues in the company who deliver water and wastewater services to the county day in and day out. It is clear that the company is a vital part of the social, economic and environmental fabric of Yorkshire, and we are committed to close working with our partners in the county.

Throughout my career, I have worked in safety-critical industries and have always had a strong focus on ensuring safety improvements for both operational staff and customers. Delivery for customers and improved efficiency will be a priority. In my last two roles, in rail and energy, we achieved year on year improvements in customer satisfaction and also managed to increase colleague engagement and enablement.

Improving Yorkshire Water's environmental performance will also be a priority as well as ensuring that we keep our services resilient to the impact of climate change and deliver on our ambitious net zero commitments.

I very much look forward to working with Iain Coucher and David Black, the new chair and Chief Executive of Ofwat as we look to deliver the next price review and set the path for the future direction of the sector.

Nicola Shaw

CEO

15 July 2022

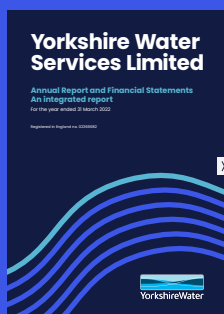
Supporting publications

We publish a suite of documents alongside our Annual Performance Report which provide additional information on our services and performance.



Regulatory Glossary

Sometimes we use words that are specific to the water industry. We've put the most frequently used words here into the Regulatory Glossary.



Yorkshire Water Annual Report and Financial Statements

Our Annual Report and Financial Statements (ARFS) provide information on our financial performance and how we are progressing with strategic business objectives.



Kelda Eurobond Co Ltd Accounts

Kelda is the owner of Yorkshire Water. This publication provides information on Kelda's performance.



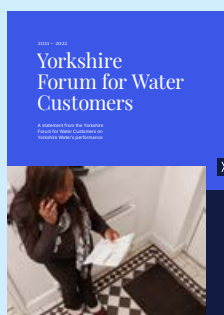
Risk & Compliance Statement

Our Risk and Compliance Statement provides confirmation that we have complied with the requirements of our licence to operate as a water supplier and the requirements set out in law.



Our Performance Summary

This is a summary of our how we have performed against our performance commitments.



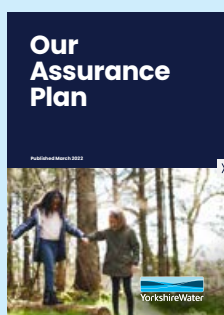
Yorkshire Forum for Water Customers Statement

The Yorkshire Forum for Water Customers has published an independent statement on our performance. This report achieves the Plain English Crystal Mark. You can view the statement [here](#):



Accounting Separation Methodology Statement

This document includes the enhancements made to processes this year and details the methods of the allocation of totex costs between price controls, as well as the allocations for the upstream services.



Assurance Plan

The Assurance Plan explains our approach to how we check our information so that you can have trust and confidence in the information we publish in our APR.

Supporting websites

We can't always fit all the information we would like to into our APR, instead we reference websites which contain useful supporting information.

Our websites

Our reports

We'd like to let you know how well we're getting on, on all the key parts of the service we provide. You can find all our regulatory reports here on this page.

Our performance

We want to let you know about how we're doing in delivering water and waste services and how we're operating as the leading responsible business that we strive to be. We put our customers at the heart of everything we do. Throughout the year you can see how we're performing against the performance commitments that matter to you.

Our business plan for 2020–2025

Over the last couple of years, we have been developing our business plan for 2020 to 2025 with our customers and stakeholders. You can read all about it here on this page.

Yorkshire Forum for Water Customers

This webpage provides details of the membership of the group, minutes of recent meetings and information on the challenges which the Forum have provided to Yorkshire Water. It also includes the independent reports published by the Forum.

Corporate governance and structure

This webpage provides information on the members of the Board, our company structure chart and corporate governance terms of reference and policies.

These webpages can be found on our 'About us' webpage.

External websites

Discover Water

Some of our information is published on the Discover Water website, allowing customers and stakeholders to see comparative performance between water companies easily.

Ofwat

Ofwat also publish information about how companies are performing in reports and publications. These can be found by visiting

Consumer Council for Water (CCWater)

CCWater is the independent voice for water consumers in England and Wales. Since 2005, they have helped thousands of consumers resolve complaints against their water company or retailer, while providing free advice and support. They publish a number of reports, including information on how all companies perform with regards to the areas that matter most for customers. You can find out more about them on the link:

About us



**Today, every day and forever
it's our job to make sure that
everyone in Yorkshire has the
water they need for their busy lives.
And, when they've used it, it's our
job to take it away and work our
magic returning it safely back to
Yorkshire's environment.**

**Water is one of life's most basic essentials
and we care deeply about taking care of it in
the right way for everyone, all of the time.**

But how we do that really matters; the resources we use and recycle, the way we look after land, our broader support to local communities, and the partnerships we develop will make a massive difference to getting it right for Yorkshire's people and places.

Our purpose

**We're proud to play
water's role in making
Yorkshire a brilliant
place to be – now
and always.**

Our behaviours

**We own it.
We're always learning.
We're better together.
We have heart.**

Our ambition

**To put people at the
heart of everything
we do.**

Our promise

**You can rely on us.
We'll make a
lasting impression.
We'll lead by example.**



What we do



We provide essential water and wastewater services to the people and businesses of the Yorkshire and Humberside region.

To do this, we collect 1.3 billion litres of raw water from the environment every day. We use energy and chemicals to treat the water so that it's safe to drink. To get the water to where it's needed we use gravity where we can, but we also have to use energy to pump it through 32,000 km of pipes.

We collect and treat about 1 billion litres of wastewater from homes and businesses (and rainwater that goes into the 52,000 km of sewers) every day as well. To do this, we use chemicals to help the treatment process and energy to run the treatment plants and pumps.

Investing over £1m every day to maintain and enhance Yorkshire's network of pipes, pumps and treatment works.

Managing 28,000 hectares of land to protect water quality and enable recreational opportunities.

Managing £1bn of water bills every year and providing customer service when it's needed.

Collecting, treating and safely returning to the environment **1.9bn litres** of water every day.

Recycling nutrients and generating energy from leftover human waste.

All maintained by around **3,900 employees**, using a fleet of over **2,000 vehicles** and increasingly complex technology, delivering for today and planning for the long-term.

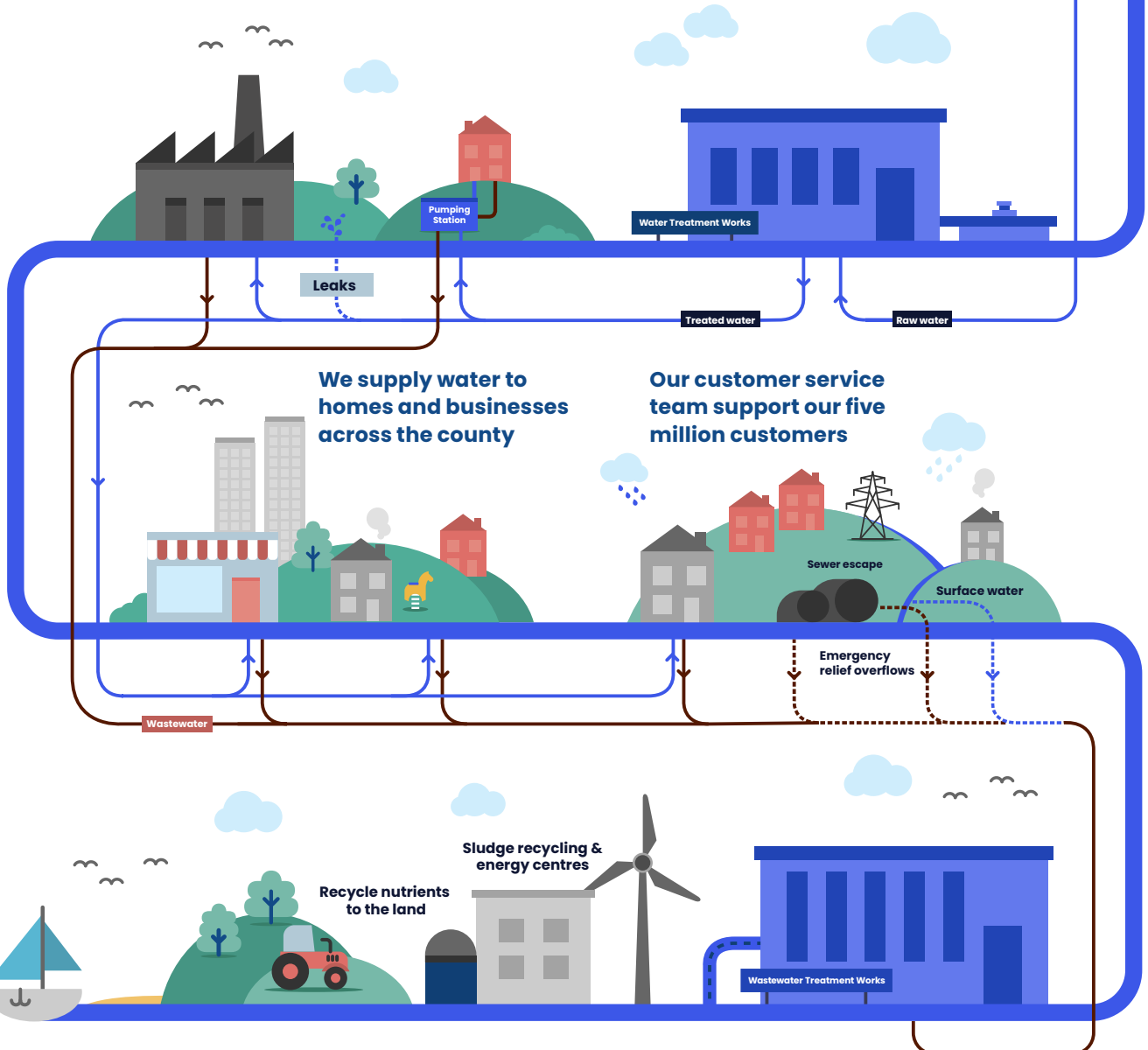
Find out more about what we do here:

We're one of Yorkshire's biggest land owners

We collect water from three main sources



We manage over 650 water and wastewater treatment works



We safely return water back into the environment

We collect 1.8 billion litres of wastewater every day

2. Statements from our Board

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Board statement on accuracy and completeness of data and information

Our aim is to produce an Annual Performance Report that covers the key information that our customers and stakeholders have told us they want to see and are interested in, while also meeting the requirements of our regulator, Ofwat.

We believe that good assurance needs to be provided at the right time, proportionate to the level of risk identified, asking the right questions and producing good evidence to support the statements made within this report and the information we publish. Assurance is vital to ensure that the data and information published is accurate and complete.

This statement is being made by the Board of Yorkshire Water to confirm the information that is provided through our regulatory reporting for the year 2021/2022 is accurate and complete.

The Board has full ownership of the provision and publication of accurate and complete data and information. Within this statement, the Board will explain how it takes this role seriously and the approach that the Board has taken to satisfy itself that the information is accurate and complete.

Our assurance framework

The Board of Yorkshire Water has continued to review the effectiveness of assurance approaches for regulatory reporting and to identify further opportunities for improvement.

A new regulatory reporting assurance framework has been implemented for AMP7. This new framework improves the focus of regulatory reporting assurance activities throughout the year, changes the way external assurance is used and improves the risk-based approach applied to regulatory reporting. The new framework was developed in line with best practice from the water industry and other regulated industries.

Our assurance framework and approach are described in more detail in our published Assurance Plan.

Our risk-based approach

Our assurance approach is risk based (this means that we place more focus in areas that are higher risk). The approach to assuring data in AMP7 must be reflective of the risks involved and needs to consider the scale of reporting requirements.

The Board recognises the importance of effective assurance over the information that it bases its decisions on and the information that we publish externally. The importance of transparency, clarity and accuracy is always emphasised by the Board and there have been detailed discussions during the year at the Audit and Risk Committee about the approach to regulatory assurance to ensure that it adequately reflects the associated risks.

It is essential that the assurance programme is responsive to the assessed risk and emerging risks. The new risk assessment process is designed to be dynamic as performance over the AMP period changes and risks increase or decrease against specific data points.

The assurance process now responds to the changing risk position, creating the appropriate assurance tailored to meet the specific risk in each area. New in-depth process audits have been implemented into the areas of higher risk to reporting. These are conducted throughout the year rather than regulatory reporting assurance that was previously completed mainly at the year end. This also provides the Board with an accurate view of risk and assurance throughout the year, enabling the Board to challenge and redirect activities as a result of the audit actions raised. The new in-year audits also provide time to respond appropriately to actions raised before the end of reporting year period.

Our three-levels of assurance

Our assurance approach uses a method called 'three levels of assurance'.

The first level of assurance is from management controls in our frontline operations, which measure performance throughout the year. The second level of assurance consists of line management reviews and reviews by oversight teams with specialist knowledge such as our finance, regulation and legal teams. Yorkshire Water has been developing the alignment of Level 2 assurance across the company, to ensure the assurance obtained, or any lessons learnt from one area, are shared with another. The third level of assurance is provided through independent assurance, which includes our Internal Audit function and external auditors. New external auditors for regulatory reporting were appointed from September 2020. Four providers have been awarded a contract on a new framework, rather than just one external company as in AMP6. A framework of suppliers, rather than one main supplier, is cost effective, provides access to a wider network of specialists and provides wider access to industry insight, knowledge and solutions. The Audit and Risk Committee of the Board has been involved in the procurement process for the new external auditors for our regulatory reporting and have approved these appointments.

Assurance in 2021/2022

To satisfy ourselves that our published information is accurate and complete all elements of our 2021/2022 regulatory reporting are subject to an appropriate assurance process. In particular:

- The assurance process includes checks and reviews of data throughout the year then additional audit checks and challenges by Data Providers, Data Managers, Senior Managers and Directors ahead of publication.
- Performance is regularly reviewed at the Yorkshire Water Leadership Team (YWLT), which is attended by directors and other senior leaders, to review current performance, challenges, issues and risks and to aid decision making on priorities in the period.

- The assurance process includes review and challenge by our financial auditor, Deloitte, and our technical auditor, Atkins. We have reviewed and actioned all findings from these assurance processes, taking action to ensure that any exceptions and weaknesses in the assurance approaches have been addressed.
- We have worked with the Yorkshire Forum for Water Customers, and listened to customers' feedback, to ensure we meet our ambitions for a document that is accessible for customers.
- The Board has utilised specific individual Directors to support the activities required in this area. The Chief Financial Officer and the Director of Strategy and Regulation have accountability for the development, assurance and publication of the various regulatory and financial submissions at the end of the reporting year. They ensure appropriate resources are in place to deliver the requirements to an appropriate standard and review and challenge compliance with the requirements.
- The Board uses the Business Investment Committee to consider the AMP7 funding strategy, in relation to the funding position and priorities for the new regulatory period.
- Performance in matters relating to social purpose and public accountability are regularly reviewed by the Public Value Committee on behalf of the Board.
- The Audit and Risk Committee monitors the effectiveness of Yorkshire Water's enterprise risk management process as well as the effectiveness and operation of Yorkshire Water's system of internal control on behalf of the Board. More information on this is included in the signed Risk and Compliance Statement.
- The Board uses the Audit and Risk Committee to support key assurance activities for regulatory reporting. This Committee takes an active role in engaging with and challenging the assurance approaches in place. It has reviewed the procurement process of external auditors, the effectiveness and independence of the external auditor, the integrity of external reporting, including significant areas of judgement, the new regulatory reporting assurance framework for AMP7, changes to assurance and improvements being driven on regulatory assurance and the outputs of completed risk assessments and the proposed assurance plans in place.
- The Audit and Risk Committee has reviewed the integrity of the regulatory reporting process relating to the APR and other regulatory submissions.
- The outputs from the completed assurance processes have been reviewed and challenged by the Audit and Risk Committee. The Committee has satisfied itself that the approaches taken have appropriately identified and addressed any risks to the provision of accurate and complete data and information in particular areas. The independent external assurance providers, Atkins, and the external financial auditors, Deloitte, independently reported their findings to the Audit and Risk Committee in July 2022.

Exceptions and Weaknesses

The Board has taken action to ensure that any exceptions and weaknesses in the assurance approaches have been addressed. As detailed above, the Audit and Risk Committee has been involved in the development and continued challenge of the assurance approach. The Audit and Risk Committee is responsible for the integrity of the content of those regulatory submissions for which Board approval is required by Ofwat. New submissions and Board requirements, or amendments to the assurance process, are reviewed, discussed, and approved in advance of submissions. Regulatory submissions are owned at an individual Director level, with the Audit and Risk Committee and Board all being engaged throughout the process, enabling them to test and challenge the progress, risks, mitigations, assurance approach and the Board statements themselves prior to approval and publication.

The key assurance findings from the APR 2021/2022 end of year audits have been independently reported to the Audit and Risk Committee, allowing the Audit and Risk Committee and the Board to challenge further where necessary.

The Risk and Compliance Statement provides more information on any exceptions that have been identified during 2021/2022 to achieving our regulatory obligations. All exceptions and departures, regardless of materiality, are reviewed and scrutinised before they are endorsed by Board prior to publication. In summary, the exceptions identified are as follows (for more information on these exceptions, please see the Risk and Compliance Statement):

- Water Industry Act: maintain maps of their sewers.
- Performance commitments: For FY22 we have met or exceeded 25 of our 44 performance commitments.

Statement

The company is required by the terms of the Instrument of Appointment to prepare regulatory accounts for each financial year in accordance with Condition F of the Instrument of Appointment and the Regulatory Accounting Guidelines. In preparing the regulatory accounts, the Board ensures, through all the measures detailed earlier within this statement, that appropriate accounting policies have been adopted and applied consistently, that applicable standards have been followed and that reasonable and prudent judgements and estimates have been made.

The Board confirms that the APR sets out how the regulatory accounting statements have been completed in accordance with the Regulatory Accounting Guidelines.

The Board of Yorkshire Water is accountable for the quality and transparency of the information provided within this report. Following reasonable and relevant enquiries the Board is satisfied that there are appropriate controls and assurance processes in place and that key risks identified have been responded to, regarding the provision of accurate and complete data and information.

This statement covers the APR, the in-period ODI determination submission and the bioresources market information publication.

Approval

The Audit and Risk Committee reviewed the processes and approach to delivery of the APR in January 2022. The Audit and Risk Committee then reviewed the completion of the process, including receiving the assurance findings from the independent financial auditor and the independent technical auditor, on 4 July 2022. At these meetings, appropriate enquiries were made on the executive team and the relevant experienced members of staff involved in delivering the APR, in particular the Director of Strategy and Regulation and also the independent financial auditor and the independent technical auditor. In between these meetings, the Board members were provided with versions of the developing report and have been able to review and provide comment.

At the Board meeting on 5 July 2022, following feedback from the Audit and Risk Committee and having made reasonable and relevant enquiries, the Board considers that there are appropriate systems, controls and assurance processes in place regarding the information contained within the report and at this meeting, the Board approved the APR, including the wording of this Board Statement on Accuracy and Completeness of Data and Information, and approved the release of the APR for publication.

The Board authorised the Company Secretary to sign this Board Statement on Accuracy and Completeness of Data and Information on behalf of the whole Board.

Signed on behalf of the Board



Kathy Smith
Company Secretary

Board statement on company performance and direction

Our five million customers who live in Yorkshire, and the millions of people who visit Yorkshire each year, rely on our services for their basic health and lifestyle. Our water is used to supply 140,000 businesses to provide goods and services that support our economy, not only in Yorkshire, but across the UK, and beyond.

This statement shows how our Board sets and reviews our ambitions and targets so that we deliver our goods and services to all our customers and stakeholders who depend on Yorkshire Water. Within this statement, we also provide information on the relationship between our financial performance, rewards for our executives and how we deliver our services.

This statement has the following sections.

- How we set our ambitions
- How we monitor performance and make decisions
- How we involve our customers and stakeholders
- How we change and update our commitments
- How we have performed in 2021/2022
- How we balance the relationship between financial performance, rewards for executives and delivering our services.

How we set our ambitions

The water industry works in five-year asset management periods (AMPs). One of the main aspects of the regulatory framework that supports this five-year planning cycle is called the 'price review'. The price review process sets the prices we charge, investment we make and services we provide to customers in each AMP.

In 2018, we published our plan for asset management period 7 (AMP7) to set out how we proposed to maintain and improve water and wastewater services in Yorkshire, to ensure resilience and sustainability for the short and long-term; at a fair and affordable price to customers in their water bills. We built our plan after engaging with our customers and regulators to understand their priorities. We used the feedback we received to define our big goals and to develop measures that would support these goals. AMP7 covers the period from April 2020 to March 2025.

Our promises to you over the five years of AMP7 are defined through our performance commitments. There are 44 performance commitments in AMP7. This annual performance report provides a record of our performance against the second year of our delivery against our the AMP7 performance commitments.

As well as delivering against our regulatory performance commitment targets, we must meet a range of legal obligations, and broader duties to customers, to the environment and other stakeholders. You can find more details of how we identify these requirements, and manage the risks of keeping to them, in our risk and compliance statement.

To deliver the performance we promised, throughout 2019/2020 we reset our company purpose, ambition and behaviours to prepare us for this new five-year period and for a period of business transformation. One of the things which makes Yorkshire Water so distinct is the shared sense of commitment and purpose felt by everyone at the company. This runs very deep in our colleagues, from the front-line teams through to the Board and it helps to guide the decisions we make. This process has resulted in a new purpose statement, vision and set of behaviours.

It sets our purpose as being proud “to play water’s part in making Yorkshire a great place to be, now and in the future.” Our ambition is “to put people at the heart of everything we do”. Meanwhile, we have adopted an approach that centres on four key behaviours: we own it, we’re always learning, we’re better together and we have heart.

How we monitor our performance and make decisions

There have been some important changes to the Board, as announced last year, Vanda Murray OBE was appointed to our Board from 1 July as a Non-Executive Director and then stepped up to become Chair on 1 September following the retirement of Anthony Rabin from the Board. We also welcomed Russ Houlden to our Board in January 2022 as a Non-Executive Director, replacing Mike Osborne who left in October 2021. Russ is the representative for Corsair Infrastructure, one of our shareholders. After the year-end we announced that Liz Barber, our Chief Executive Officer, had decided to retire from the business and we were pleased to announce that Nicola Shaw CBE had been appointed in her place. Liz left the business on 6 May 2022 with Nicola joining on 9 May 2022.

The Board makes all decisions with a view to the longer term. The long-term strategy of our business was published in 2018 following significant consultation with our customers. We continue to review our long-term strategy to ensure that it remains aligned with the priorities of both customers and stakeholders, and that it aligns with the wider requirements of our region. The external environment has changed significantly in the last four years, our strategy review will take account of this and describe how we will deliver our services in the future with a focus on increasing the resilience of the company and the region. The Board has been involved in several workshops during the year and approved the strategic vision for the business at a workshop in September 2021.

The Board had six scheduled Board meetings in 2021/2022, with two additional ad-hoc meetings held to review and approve the detailed Business Plan for the year and the business case for our ongoing transformation programme. During the year the Board met face-to-face whenever possible in accordance with the COVID-19 restrictions in place at the time. At each meeting, the Board considers health and safety, financial and non-financial performance, including past and expected future performance.

To ensure that all Board members stay up to date, they receive a full monthly company report. This consists of an update on our financial performance, how our employees are getting on, and an update on our operational performance including a summary of how we are keeping to our standards and following health and safety guidelines. We do this whether or not a Board meeting is scheduled.

The Board meets both formally and informally with senior management across the business, gaining insight into the day-to-day operations and the main risks and opportunities facing each part of the business. Members of the Yorkshire Water Leadership Team and senior managers are regularly invited to attend meetings with the Board to share information and give the non-executive Board members regular direct access to the senior management team.

There is a schedule of matters reserved for the Board which sets out the specific matters that must be referred to the Board for approval. These include matters relating to the structure of the company, our policy on dealing with dividends, significant issues to do with regulations and press releases, along with significant operational matters.

In 2019 the Board created a Colleague Engagement Forum, which meets regularly throughout the year. At least one non-executive Board member attends each meeting and minutes from the meetings are circulated to all Board members for information.

Forum members are free to raise any matters at the Forum and key topics on which the Board would like to receive feedback are also included on the agenda for each meeting.

There is also a colleague engagement survey which seeks to understand the views of colleagues across multiple topics. The feedback from our survey in late-2021 was shared with the Board for information, to give the Board a clear understanding of the business sentiment.

Decision making will inevitably involve some trade-off to make sure we take a fair and reasoned approach to delivering our services. To help us with our decision making, we are using the concept of the 'Six Capitals'. The Six Capitals are shown below.

1. Financial capital – our financial health and efficiency
2. Manufactured capital – our pipes, treatment works, offices and information technology (IT)
3. Natural capital – the materials and services we rely on from the environment, for example water
4. Human capital – our workforce's abilities and wellbeing
5. Intellectual capital – our knowledge and processes
6. Social capital – our relationships with our customers and stakeholders and our customers' trust in us.

Companies traditionally focus on financial and manufactured capital. Our decision-making is improved by considering the positive and negative impacts and trade-offs between all Six Capitals. This helps us take a more holistic approach to decision making and investment choices, provides a rich understanding of business risks and opportunities, and ultimately ensures we deliver sustainable long-term value for our customers and other stakeholders.

Our latest assessment of our delivery to our stakeholders has been published in a report called 'Our Contribution to Yorkshire' and covers the 2020/2021 reporting year. Our results highlight many positive examples of the public value generated by Yorkshire Water. These include our support for vulnerable customers, our work to protect and enhance the environment, and our continued focus on colleague safety and wellbeing. However, our findings also reveal areas where we know we need to work harder to reduce our negative impacts, such as by minimising waste, reducing our carbon emissions, and building trust within our supply chain. The report is available at

In addition to our Six Capitals approach, we continue to use horizon scanning to provide insight into the emerging trends and events that may affect Yorkshire Water's strategic position and ability to operate in the future. The approach to horizon scanning is twofold: at a tactical level it will ensure that the business can be agile in the short term and at a strategic level it will ensure that the business can plan ahead for the medium and long term, based on trends indicated by the scan.

Our horizon scan has three objectives to:

- Encourage the external focus of the organisation,
- Set the content for the exploitation of opportunities and development of strategy, and
- Inform the company of external risks that may need to be managed.

Our horizon scan and actions arising from the scan are shared with the Board and Audit and Risk Committee and are used to inform the company's Annual Report and Financial Statement (ARFS) and the company's strategic annual review.

How we involve our customers and stakeholders

Our ongoing engagement with customers and stakeholders ensures we continue to understand and meet their changing needs and enables us to design our services to meet those expectations. Over the course of the last two years, the impact of the COVID-19 pandemic changed the way in which we engaged and communicated with our customers and stakeholders. Rather than the traditional approach of talking to customers about what we do as a company, our focus has been on understanding the impact of COVID-19 on individual lifestyles and how the pandemic shaped what customers wanted, needed and expected from us. With help, support and challenge from the Yorkshire Forum for Water Customers, we have developed a much richer understanding of the diversity of Yorkshire's people, their individual needs, and how best we meet these now and into the future.

Our continuous customer and stakeholder engagement also informs and shapes our long-term strategy and day-to-day service delivery. This participation has been crucial to the development of our business and operational planning, ensuring the continuous and safe delivery of our services throughout the pandemic and beyond. We have employed a range of research and wider engagement techniques to ensure customers and stakeholders have provided us with timely insight to inform and support our ongoing activity. We've begun to deliver our new customer experience strategy. Key activities have included defining a data model to measure customer emotion.

As we look ahead to Year 3 of AMP7, our focus will be on delivering our new improved customer journeys and embedding our customer promise through ongoing training and development. Our training will focus on core areas across vulnerability, managing unplanned incidents and events and improving overall customer satisfaction. We will also be progressing our IT road map, continuing our development of our online self-serve customer journeys and improvements around our incident map functionality to ensure customers can understand what's going on in their area in real time. We will see some significant changes in our operational customer experience as we launch a new operating model focused on the purpose of recovering and resolving customer issues on the first contact as well as working closely with the planning and scheduling programme as the transformation work continues to improve our capability across our customer journeys. Our new approach to customer engagement will go live this year with the new Yorkshire Engagement team to support communities and behaviour change to help further drive C-MeX and Operational Performance Commitments.

We'll also be developing new approaches to engaging with regional stakeholders to ensure our long-term plans and day-to-day service delivery reflect the needs and ambitions of the region. In response to the line with the ambitions set out in the National Infrastructure Strategy we'll be working with the Yorkshire Leaders Board (which includes representatives from every local authority in the region) and other key organisations to develop a new model for how our regional stakeholders can play a bigger part in setting our priorities and shaping our service.

We have a Board committee with a focus on the social purpose and public accountability of the organisation. We call this the Public Value Committee. We recognise our role as an anchor institution in Yorkshire and that we provide an essential public service, as well as playing a key role in the health, wellbeing and prosperity of the region. For more information on the Public Value Committee, please see the report in the Annual Report and Financial Statements. We continue to regularly discuss our performance with the independent Yorkshire Forum for Water Customers.

Working in partnership with Yorkshire

Partnership working with Yorkshire's institutions and communities is a central part of our strategy. Throughout the pandemic we have worked closely with local authorities in particular, and we regard ourselves as a public service which happens to be privately owned. As an anchor institution we recognise that collaboration with other anchors of the region's economy and social fabric means that we can maximise our impact and contribute to the inclusive growth of the region. If the region grows then this creates opportunity for Yorkshire Water to grow.

At a strategic level we have engaged with the Yorkshire Leaders Board to ensure it plays a significant role in the delivery of our business plan for the next price review. The Leaders Board brings together the leaders and chief executives of Yorkshire's local and mayoral authorities, so this engagement delivers on the aspiration of the National Infrastructure Strategy for regional elected bodies to help set the priorities for water utilities.

The early stages of this process have been very positive, and it has quickly become clear to the extent that investment in our network is a really important enabler for the growth ambitions of local authorities, particularly with regards to house building. As work on the plan develops further, we expect this engagement to continue to develop.

At a sub-regional level, the Living with Water partnership has matured significantly over the last four years with dedication from all partners to ensure the vision, objectives and goals of the partnership are met. The AMP7 investment programme has benefitted hugely from the advance in partnership relations and a series of model improvements and improved technical understanding. Improving value for money to customers by prioritising schemes based on areas of significant flood risk, opportunities to align wider investment/refurbishment and SuDS opportunity areas. The partnership is now aligning programmes beyond water management and looking at opportunities to merge housing, highways and other regeneration projects with surface water management.

In addition to investing in flood resilience infrastructure, the partnership focusses on improving resilience through education; community engagement and co-creation; and the effective planning for and responding to extreme weather incidents. Some of the key achievements of the partnership to date are: delivery of over 1,200 education hours across schools, colleges and community groups; opening of the Living with Water lab; a joint Supplementary Planning Document to control surface water discharge and collaboration with a number of local universities on key pieces of research and course development.

On a more strategic level, the Living with Water partners have developed a city water resilience approach and a joint blue green vision for the city which will be the framework within which future flood resilience investment will be delivered.

In 2021, we worked with four local authorities – Barnsley, Sheffield, Rotherham and Doncaster – as well as the South Yorkshire Mayoral Combined Authority and Environment Agency, to form Connected by Water. This is a South Yorkshire alliance which draws on our experience of collaboration in Hull and aims to build flood resilience in the river Don catchment and respond to the climate emergency. The drive for the creation of the alliance came from the impact of the 2019 floods in the catchment and from a clear realisation that resilience needed to be managed on a catchment wide basis with a single strategic plan and aligned investment from all the partners.

Connected by Water opened a consultation on its action plan in January 2022. This plan is built around four themes: responding to the climate emergency, smart investment, technology & operational management, and community engagement & resilience. The consultation received a very positive response, and the final version of the plan will be published later this year.

Discussions are underway with the recently elected West Yorkshire Mayor and other local authorities to replicate this model in the Aire and Calder catchments.

Yorkshire Water is the second biggest landowner in Yorkshire and we have known for some time that the management of our landholdings has a significant part to play in climate response and adaptation and nature recovery. Realising that anything we can achieve on our own will be magnified by collaboration with other institutional landowners, we convened the Yorkshire Land Network to facilitate collaboration in all these areas. The Network has been supported by the large private estates such as Devonshire, Wentworth and Fitzwilliam and the Duchy of Lancaster as well as Crown Estates, Church Commissioners, the National Trust and Forestry England. The network has already made good progress in collaborative projects on recreation and is looking to focus on joint land use projects over the next 12 months.

How we change and update our commitments

Although we set our regulatory performance commitments using a five-year cycle, our commitments can change. As well as the ambitions we set ourselves during price reviews, our ambitions are also influenced by best practice throughout the world. The United Nations Development Programme has formally adopted a set of 17 sustainable development goals (SDGs) which are backed up by 169 targets. We have assessed where we can make the most substantial contribution to these goals by increasing the value we create for communities in Yorkshire and by reducing our carbon footprint. You can find out more about the SDGs at

Further information on our progress with these goals is provided within our Annual Report and Financial Statements.

In April 2019, the water industry published six stretching goals called 'Public Interest Commitments'. All of these goals go beyond planned commitments within our current business plan. We actively helped the industry to shape these commitments and they work alongside our plans for AMP7 and beyond. You can find the public interest commitments at

How we have performed in 2021/2022

On their own, our performance results do not really reveal either the operational challenges we have faced during the year, or indeed the significant achievement of our colleagues in maintaining and improving the service to our customers.

This Annual Performance Report provides detailed information on our performance and not just the numbers. We explain our latest performance, including where we have been successful in meeting, or going beyond our performance commitments, and where we didn't meet the targets we set.

We have met 25 out of 44 performance commitments this year. You can find more information on our performance against all 44 of our performance commitments within the Annual Performance Report.

We and the other water companies in England and Wales provide information to a central hub so you can compare how we are performing against each other and how the water industry compares with other sectors. Visit [this link](#) to find the latest information on water quality, environmental performance, customer service and water bills.

We committed to a policy of being 'open by default' by 2020 and this has continued throughout 2020/2021. To find out more visit our open data section on our website:

How we balance the relationship between financial performance, rewards for executives and delivering our services

We believe in the importance of being open and transparent about paying our directors and we try to make sure we pay our directors fairly in relation to their experience, their performance, the demands and complexity of their role and the experience our customers have. We strive to ensure the reward received by our directors is market competitive, consistent, simple, value based and balanced, as well as ensuring it is reflective of the pay and employment conditions across the rest of the business and in the communities we serve. We want to ensure we remunerate fairly; we are able to attract and retain the right calibre of talent; and we want to ensure the reward structure drives the right behaviours, appropriately rewarding strong performance whilst not rewarding poor performance.

You can find full details of our directors' pay in our Directors' Remuneration Report, which is published in our Annual Report and Financial Statements.

Statement approval

At the Board meeting on 5 July 2022 the Board approved this statement on our direction and performance. The Board authorised the Company Secretary to sign this statement on behalf of the whole Board.

Signed on behalf of the Board

A handwritten signature in black ink, appearing to read 'Kathy Smith', written over a light blue horizontal line.

Kathy Smith
Company Secretary

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Links to more information

We've provided more information on our performance than ever before. Click on the links below to view our other publications and webpages on our performance.

Visit

to see the Yorkshire Forum for Water Customers independent report on our performance

Want a summary of our performance? Visit

to view our Performance Summary report

Want to see the Ofwat performance tables?

Go to [Table 3](#) in this APR

Want to know more about how we assure our information?

Visit

to view our Final Assurance Plan

Want to see how we've performed on our performance commitments throughout the year? Visit

for more information

Want to know how our performance compares with other water companies? Visit

to view the Discover Water website

Our assurance process

Assurance is the process we use to make sure the work that we do and the information we provide is correct and trustworthy. We use it to identify any potential errors, make improvements and monitor the ways we work. It's important to us that our customers and stakeholders can trust the quality of the information we publish.

To make sure our information is accurate and you can trust what we publish, we use a way of working called the three levels of assurance. This is a process for checking our activities and information. It's our methodology. This is a comprehensive approach which uses layers of assurance that are effective in identifying where things can be improved. This also gives us consistency across our work and, combined with a comprehensive risk assessment, we can apply the right amount of assurance at the right time.

Level 1

The first checks take place when the people doing the work check what they have done is correct. These checks can be during or after what they are doing.

Level 2

Teams specifically in place to carry out checks make sure that the work carried out is correct and support level 1 to do so. They also do risk assessments, check we are working within the law and write reports for the Board to evidence their work.

Level 3

Internal Audit and our external assurance providers check the overall processes and output to make sure we are compliant, we have identified all risks and undertake plans for improvement. They report directly to the Board.

The Assurance and Risk Committee

Everything that is identified in this process is presented to this committee. The assurance process is overseen and approved by this committee.

The Board

The outcome of our audits are presented to the Board and they approve the information that we report.

Stakeholders

We ask our customers to give us feedback and our regulator, Ofwat, also assesses the information that we provide.

Our assurance plan for the annual performance report

We have specific assurance processes in place to make sure that the data within our APR is accurate. The steps within the process are detailed below.

1: Planning

We review the guidance available to understand what is required within the new APR and to review what our customers, regulators and other interested parties want from the APR. We put a plan in place to make sure we can deliver what is required by the publication deadline.

2: Risk Assessment

When we make our plans for assurance, we know that different information may require different amounts of assurance. We risk assess all data to identify which processes produce the data which may be higher risk. Higher risk processes are those which have a greater likelihood that something could deviate from what was planned which may affect what we report if it does.

We use this information to create a risk-based assurance plan. A risk-based assurance plan helps us target our assurance to these high-risk areas of reported information and focus on improvements that are in our customers' best interests.

3: Developing and completing our assurance

We have specific activities that take place within our three lines of assurance to make sure that our data is accurate. We have detailed these steps on the next page.

4: Approval and publication

We present the outcomes of our assurance to our Audit and Risk Committee who then report to our Board. The Board is accountable for the quality of the information that we publish. It owns and approves the information within our APR. If the Board is satisfied that processes have been followed and any findings from assurance have been appropriately actioned, it will give approval for our APR to be published. You can read more about the assurance the Board provide in the Board Statement of Accuracy and Completeness of Data and Information in **Section 2** of this APR.

5: Review

When we have published our APR we look back over the assurance process that we applied to understand what we could improve. We gather feedback internally, from customers and other stakeholders, and we review what could have gone better to create an improvement plan which we implement within our next risk-based assurance plan.



Our data improvement plans

Our external auditors, Atkins, identified some areas where we could improve and develop our reporting. These areas received amber ratings to reflect this. We've listed some of these areas below, together with our plans for improvement. Some of the areas we need to target are under review to understand the best actions to take.

Performance Commitment	Improvement identified	Plan
Low pressure	It is recommended that we conduct a review of our approach to low pressure incidents, to ensure that performance commitment outcomes remain robust and customer focused, for all reported instances.	We'll be reviewing our end-to-end process over the coming year with key stakeholders to ensure we incorporate the appropriate process improvements highlighted during the audit. This will include better visibility of DMA pressure logger coverage and calibration programmes. We'll also work with operational teams to understand how we can capture additional evidence to demonstrate the customer experience has been improved.
Pollution incidents	It was identified that currently there is no mechanism in place for proactively capturing spills from treatment works and pumping stations, that could potentially lead to a pollution incident. Atkins are aware that Ofwat and the Environment Agency consider that companies should have a mechanism for capturing and self-reporting pollutions that arise from spills, but it is likely that this will be a requirement in future and has been recorded as a risk.	We are putting procedures in place to investigate incidents that have the potential to be a non-compliance. These procedures include several stages of escalation. We will continue to work with Ofwat, and the Environment Agency as emerging industry changes develop, and we will ensure that our current and future procedures align.
Sewer collapses	Atkins identified that we could improve the way in which we evidence our process, reporting, controls, and business risks. This includes looking at our system capabilities to capture and manage incidents. This has not affected this years reported data.	We have future system changes in development that will allow the status of a collapse to be reported with more accuracy which will be available for APR23. In the meantime, we will continue to work on the application of the reporting guidance, and how this relates to sewer flooding and pollution to ensure alignment of our reporting.

Surface water management	It was identified that we should be presenting greater detail in supporting documentation when demonstrating compliance against this commitment, and therefore improvements to the reporting mechanism and procedures should be made.	Plans are in place to ensure that additional requests for data are shared with the Delivery Assurance Group and Floods Steering Group. We are also working with our key stakeholders to ensure that we have greater detail behind our data, which will aid in reporting to demonstrate compliance.
Total household complaints	Areas for improvement to our internal quality checks reporting were identified. This included rectification of errors found whilst performing quality checks, and improvements to reporting when errors were found. It was advised that we develop a performance monitoring report with commentary.	Throughout the coming year we will be reviewing the internal checks procedure to allow us to extract the data and enable records to be corrected at the time of identification. We will also be creating a dashboard, along with supporting commentary.
Integrated catchment management	Atkins recognised that we are confident in the production of our first plan in APR23. However, a clearer understanding of the requirements, and the correct support is required to mitigate any risk against this performance commitment not been met.	We continue to provide support to our teams who are accountable for this measure, including targeted reviews of the implementation and progress of these schemes.
Renewable energy generation	Inaccuracies were identified in the recording instruments for this measure, therefore, assumptions are made to calculate some of this data, though it was recognised that the methodology is the best available given the existing constraints. These inaccuracies mean that the efficiency and performance of the digesters is not fully understood at this time.	We are looking into the possibility of implementing a scheme which would improve the reliability of reporting in this area and improving the data from our digesters.
Data item	Improvement identified	Plan
Social tariffs	The methodology used for assessing the correctness of bill values, in the calculation of the social tariff needs to be reviewed. We need to understand if the approach currently is correct, and Atkins have asked us to review how the underlying calculation are applied. This will be revisited in 2023 APR.	We are reviewing the calculation methodology to understand what the most appropriate criteria for assessment is. We will ensure that this is robust and consistent for 2023 reporting.
Length of new mains (km) requisitions and SLPs	An 'amber' status was reported against our methodology and data, with the main focus being on network developments with newly installed mains. We work with third party suppliers who support us and provide us with data for these numbers. However, inaccuracies were found within the numbers, and available supporting documentation.	We have already taken steps to improve the accuracy of our data, and a full review will be completed during the coming months. We plan to start implementing recommendations immediately which will see substantial data improvements in the short term, with full improvements realised for 2024 reporting. We understand that this is a full continuous improvement process.

Population (water and wastewater)	No issues were identified with our reported numbers based on the methodologies used; however, Atkins have recommended that we look at our water and wastewater methodologies to ensure that they are aligned and do not lead to under reporting.	Both clean and wastewater areas are working collaboratively to investigate the methodologies used in each other's areas. Analysis has also commenced, and the outcomes shared, leading to improvements to be made, and actions been taken to address any identified risks.
Average pumping head	Considerable improvements were seen in the changes made over the last year to our methodology, but further work is still required to produce robust data and quality checking measures.	Further to our commitment last year to improve this reporting, we have implemented a significant number of enhancements throughout the year. Unfortunately, this process was not fully completed prior to reporting this year, however, this should be in place for our 2023 reporting.
Comm-unication pipes	The underlying data which calculates this dataset contains assumptions, as identified in last year's APR audit findings. A data project was established to review this information, and to improve the accuracy of our underlying calculations, to increase the confidence in our reporting. It was recognised that this data project should continue through to completion.	Our data project continues to review items of information that we can use to improve the accuracy of our underlying calculations and increase confidence in our reporting. This is due to be completed for 2023 reporting.
Treatment works classification	We updated our Population Equivalent data following last year's audit finding, however, we need to provide further explanation on the underlying calculations to ensure they are correct.	Steps have already been taken to review our datasets and their source. We will be reviewing our calculations across the year to ensure accurate and evidenced reporting.
Length of sewers	We reported a backlog of GIS amendments that need to be made to the sewer network, of which we believed impacted on 6% of our total sewer length. We were asked to investigate this further and confirm the findings to Atkins.	We have already taken significant steps to investigate and reduce the backlog; we will continue to reduce this backlog and look for ways to improve the process.
Sewer refurbishment/ Sewer profile	Areas of improvement have been identified where we can strengthen our processes when recording sewer refurbishment works. This includes capturing a more detailed breakdown of these refurbishment jobs, for example, reporting individual lengths rather than an overall total.	Due to time constraints, we could not resolve this prior to this year's submission. We are engaging with the areas of the business and are developing plans to ensure that we have a robust dataset.

Introduction to our performance commitments

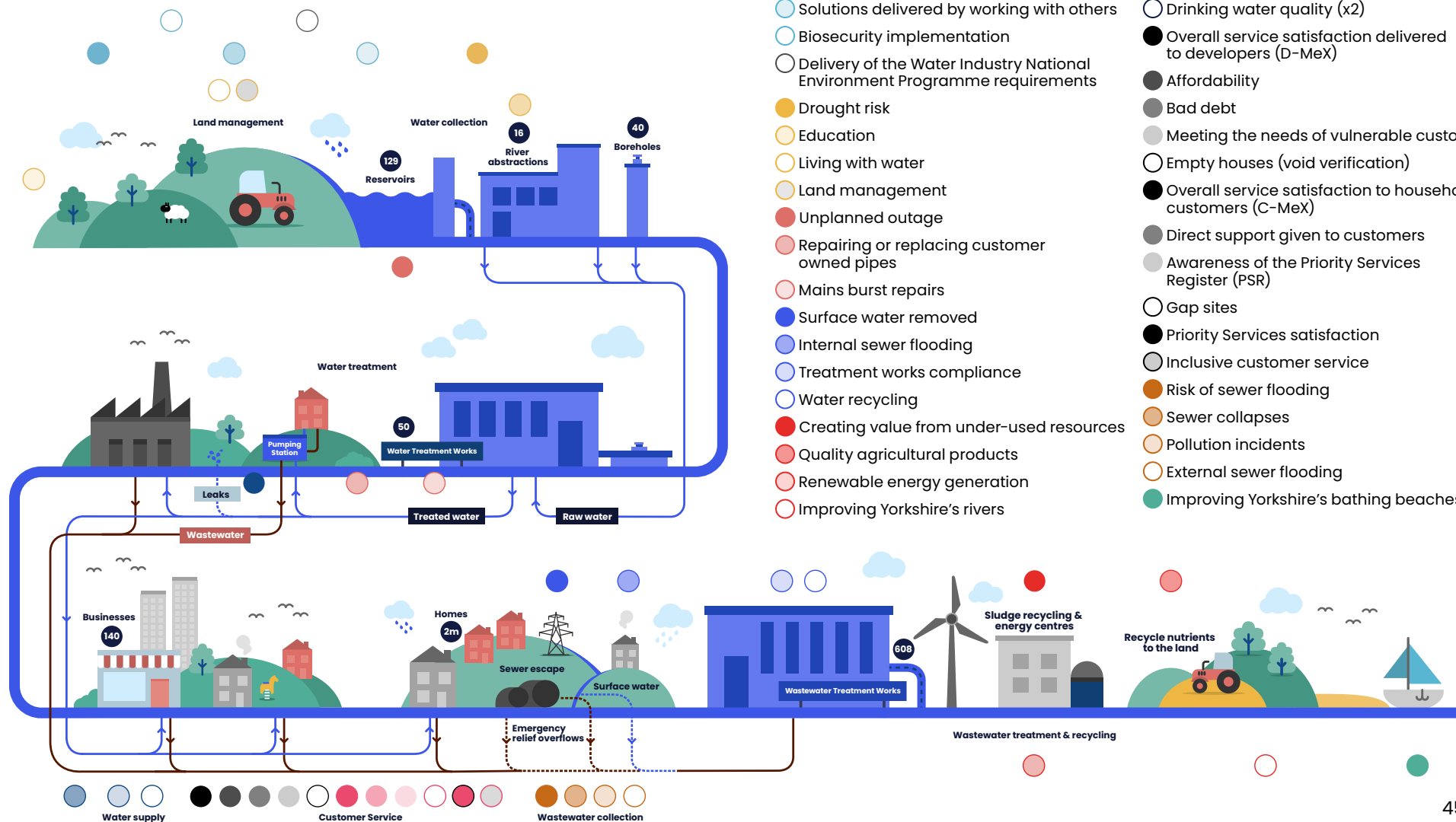
Our business plan for the 2020–2025 period (known as AMP7) puts our customers at the heart of everything we do. We've engaged with 30,000 customers, and the Yorkshire Forum for Water Customers (an independent Forum which supports Yorkshire Water to manage its business in the best interests of its customers), to understand individual lifestyles and how they shape what customers want, need and expect from us. We've listened to customers' aspirations for us and developed a plan that puts excellent and efficient service front and centre of our ambitions.

In response to customer feedback, we developed a package of 44 performance commitments for AMP7 which align with our ambitions and challenge us to change the way we work to meet both customers' expectations and the complex long-term challenges that we face as a business.

The diagram on the next page shows how these 44 performance commitments cover every aspect of what we do, from water source to sea.



Our source to sea operation



Key to our performance commitments

- Reducing our carbon footprint (x2)
- Integrated Catchment Management
- Land conserved and enhanced
- Solutions delivered by working with others
- Biosecurity implementation
- Delivery of the Water Industry National Environment Programme requirements
- Drought risk
- Education
- Living with water
- Land management
- Unplanned outage
- Repairing or replacing customer owned pipes
- Mains burst repairs
- Surface water removed
- Internal sewer flooding
- Treatment works compliance
- Water recycling
- Creating value from under-used resources
- Quality agricultural products
- Renewable energy generation
- Improving Yorkshire's rivers
- Leakage
- Water usage (per capita consumption)
- Water supply (x3)
- Drinking water quality (x2)
- Overall service satisfaction delivered to developers (D-MeX)
- Affordability
- Bad debt
- Meeting the needs of vulnerable customers
- Empty houses (void verification)
- Overall service satisfaction to household customers (C-MeX)
- Direct support given to customers
- Awareness of the Priority Services Register (PSR)
- Gap sites
- Priority Services satisfaction
- Inclusive customer service
- Risk of sewer flooding
- Sewer collapses
- Pollution incidents
- External sewer flooding
- Improving Yorkshire's bathing beaches

Outperformance and underperformance

Some of our performance commitments have been identified as being of greater importance to our customers or our Regulator. To reflect this importance, some of the performance commitments have Outcome Delivery Incentives (ODIs) attached to them. ODIs are financial rewards and penalties that are triggered by hitting set performance commitment targets. The targets are designed to challenge us to improve the levels of service provided to our customers and often become more challenging each year.

This means that, for some performance commitments, if we fall short and don't hit our targets, we will receive a financial penalty. If we were able to deliver more, we may receive a financial reward. Some ODIs are penalty only, meaning if we do not perform as expected we will receive a penalty, but there is no reward if we outperform.

Not all our performance commitments have financial incentives, some have only reputational incentives. Although performance commitments with a reputational incentive don't offer a reward or penalty, how we perform can affect how we are seen as a company, making them just as important.

Comparing our performance

All water companies have their own set of performance commitments which have been individually developed to meet the needs and concerns of each company's customers. This can make it difficult to compare performance across different water companies, even similar sounding performance commitments can have different definitions.

Yorkshire Water have 44 performance commitments in total. 15 of these are shared across the water industry, known as common performance commitments. We talk about our common performance commitments on [page 53](#) onwards.

Discover Water

Discover Water () was launched in 2016 to bring key water company information together in one place for customers. The dashboard provided by Discover Water is a clear and simple source for trustworthy and factual information including how companies are performing against each other in key areas.

Ofwat

Ofwat publish a '**Monitoring financial resilience**' report each year using the information published by water companies in their Annual Performance Reports. The report compares the financial resilience and performance of the water industry.

Ofwat also publish a **Service Delivery Report** annually in November. They assess the performance of water companies and rank them in various areas including pollution, water supply interruptions and leakage.



How did we perform against our performance commitments?

The Yorkshire Water team has done a great job maintaining a resilient and excellent service to our customers throughout the pandemic and the three severe weather events experienced throughout a very challenging this year.

There has been some positive performance on both the clean and wastewater sides of the business, despite the climate volatility experienced, especially in the last quarter of the year. We have completed leakage surveys on all of our trunk mains and this has made a material contribution to the achievement of our leakage reduction performance commitment for the second year in a row. We have achieved performance commitments for a number of asset health metrics such as mains repairs, sewer collapses and low pressure as well delivering operational carbon reduction. Our performance on external and internal sewer flooding has also been impacted by the storm events of early 2022. While we met our performance commitment for minimising external sewer flooding we did not meet our internal sewer flooding performance commitment even though we continued to make significant year on year improvements in performance.

Over the past year, we have not always met the standards we set ourselves in areas such as customer minutes lost, unplanned outage and internal sewer flooding. We experienced a number of substantial bursts in water mains which have led to an increase in our unplanned outage figures. While we still met our performance commitment for unplanned outage our performance was not as good as we had planned. The water main bursts we experienced, combined with the impact of Storm Arwen, also led to an increase in our water supply interruptions which ended higher than our performance commitment.

Overall this resulted in us achieving 25 out of our 44 performance commitments this year. The table below gives an overview of each performance commitment, the target, and our actual performance for this year. Over the next few pages we explain in more detail what went well and what we need to improve.

Performance commitment	Unit (how it's measured)	Target	Performance (how we did)	Pass or fail	Reward or Penalty
Water quality compliance (CRI)	Numerical CRI score, reported to two decimal places.	0.00	4.83	×	£3.47m penalty
Water supply interruptions	Hours:minutes:seconds (HH:MM:SS) of water supply lost per property per year.	00:06:08	00:10:38	×	£5.54m penalty

Performance commitment	Unit (how it's measured)	Target	Performance (how we did)	Pass or fail	Reward or Penalty
Leakage	Percentage reduction of leakage from 2019/2020 baseline.	7.4%	7.9%	✓	£209k reward
Per capita consumption	Percentage reduction of measured water usage, per person, per day, from 2019/2020 baseline.	4.9%	0.1%	✗	Calculated in 2025
Mains repairs	Number of repairs per 1,000 km of mains.	183.6	169.8	✓	No penalty or reward
Unplanned outage	Percentage of peak week production capacity.	4.42%	3.82%	✓	No penalty or reward
Risk of severe restrictions in a drought	Percentage of the customer population at risk of experiencing severe restrictions in a 1-in-200 year drought, on average, over 25 years.	0.0%	4.0%	✗	Reputational only
Priority services for customers in vulnerable circumstances	Priority Services Register (PSR) reach : percentage of households that the company supplies with water and/or wastewater services that are registered on the company's PSR;	5.8%	3.9%	✗	Reputational only
	Actual contacts : percentage of distinct households on the PSR that the company has attempted to contact over a two-year period;	35.0%	14.3%	✗	Reputational only
	Attempted contacts : percentage of distinct households on the PSR that the company has actually contacted over a two-year period.	90.0%	45.2%	✗	Reputational only
Internal sewer flooding	Number of internal flooding incidents per 10,000 sewer connections.	1.63	2.83	✗	£10.12m penalty
Pollution incidents	Number of pollution incidents per 10,000 km of the wastewater network.	23.74	27.36	✗	£2.48m penalty
Risk of sewer flooding in a storm	Percentage of population at risk from internal hydraulic flooding from a 1 in 50-year storm.	22.20%	5.65%	✓	Reputational only
Sewer collapses	Number of collapses per 1,000 km of sewer network.	17.55	11.71	✓	No penalty or reward
Treatment works compliance	Percentage compliance of our treatment works.	100%	99.03%	✗	No penalty or reward

Performance commitment	Unit (how it's measured)	Target	Performance (how we did)	Pass or fail	Reward or Penalty
C-MeX	Customer service level of service scoring out of 100.	n/a	10th	✗	Estimated £15k penalty
D-MeX	Developer services level of service score out of 100.	n/a	17th	✗	Estimated £3.39m penalty
Working with others	Number of projects completed to 31 March 2022.	9	16	✓	Calculated in 2025
Land conserved and enhanced	Number of hectares of land conserved or enhanced by land management and biodiversity activities to 31 March 2022	6,096	6,656	✓	Calculated in 2025
Integrated catchment management	Percentage of catchments with the 'Natural Capital Operator' approach implemented with stakeholders to 31 March 2022.	0.00%	0.00%	✓	Reputational only
Length of river improved	Cumulative length of river improved in kilometres to March 2022.	45.6km	50.08km	✓	Calculated in 2025
Biosecurity implementation	Cumulative number of pathways where company biosecurity interventions have reduced the risk of that invasive species spread to 31 March 2022.	3	2	✗	Reputational only
Operational carbon	The percentage reduction in real terms of net operational carbon equivalent emissions from the 2019/2020 baseline.	4.8%	6.8%	✓	£472k reward
Capital carbon and carbon arising from owned land	Percentage reduction in capital carbon emissions and carbon emissions arising from land the company owns.	n/a	44.5%	✓	Reputational only
Education	Number of learning hours that Yorkshire Water provides to raise understanding of the value of water.	20,000	22,576	✓	No reward or penalty
Creating value from waste	The cumulative value the company creates from resources currently under-used or classified as waste (£m) to 31 March 2022.	£5m	£40m	✓	Reputational only
Water recycling	The volume of water recycled in the company's treatment sites in megalitres per day (Ml/d).	2.77	0.00	✗	£41k penalty
Affordability of bills	Percentage of customers who give positive responses to independent survey.	82%	79%	✗	Reputational only

Performance commitment	Unit (how it's measured)	Target	Performance (how we did)	Pass or fail	Reward or Penalty
Direct support given to customers	The number of residential customers who receive financial support through one of the company's approved schemes each year.	69,000	80,778	✓	Reputational only
Cost of bad debt	Percentage of the annual bill which represents the cost of unrecovered residential customers' bills ('bad debt').	3.37%	3.28%	✓	Reputational only
Priority services awareness	Percentage of household customers who state, when questioned, that they are aware of the additional services offered by the Priority Services Register (PSR).	54%	47%	✗	Reputational only
Priority services satisfaction	Percentage of residential customers on the Priority Services Register who are satisfied with their experience of the Priority Services Register.	84%	80%	✗	Reputational only
Inclusive customer service	Percentage improvement in the services provided to customers on the company's Priority Services Register (PSR).	8%	20%	✓	Reputational only
Gap sites	Percentage of gap sites brought into billing within 12 months of identification.	83%	83%	✓	No penalty or reward
Managing void properties	Percentage of household served which are classified as void.	4.33%	3.78%	✓	£1.99m reward
Drinking water contacts	Number of times the company is contacted by consumers due to the taste and odour of drinking water, or due to drinking water not being clear, reported per 10,000 population.	10.6	10.9	✗	£370k penalty
Significant water supply events	Number of supply interruption events lasting for a duration of 12 hours or longer.	13	41	✗	£7.42m penalty
Low pressure	Number of properties receiving or at risk of receiving pressure below the low pressure reference level.	13	4	✓	No penalty or reward

Performance commitment	Unit (how it's measured)	Target	Performance (how we did)	Pass or fail	Reward or Penalty
Repairing or replacing customer pipes	Number of residential supply pipe repairs and renewals carried out by the company each year for no charge.	7,109	7,335	✓	£101k reward
External sewer flooding	Number of external sewer flooding incidents per year.	6,809	4,578	✓	£17.63m reward
Bathing water quality	Number of designated bathing waters which exceed the European Union Bathing Water Directive requirements.	18	16	✗	£2.47m penalty
Surface water management	The cumulative number of hectares (Ha) of surface water run-off removed or reduced to 31 March 2022.	4	2	✗	£10k penalty
Quality agricultural products	Percentage of biosolids sent to agricultural land that achieves Biosolids Assurance Scheme (BAS) certification.	100%	100%	✓	No penalty or reward
Renewable energy generation	The gigawatt-hours of energy generated from the biogas the company produces.	284	323	✓	Reputational only
Delivery of water industry national environment programme (WINEP) requirements	Number of required schemes completed each year, as per the latest WINEP programme published by DEFRA.	Met	Met	✓	Reputational only
Living with water	Amount of money (£m) invested into reducing the risk of internal flooding in the areas of Hull and Haltemprice.	-	£1.612m	-	Calculated in 2025

For further details on how we have performed please see '[Section 3](#), How we're progressing with our performance commitments' in our Annual Performance Report.

Common Performance Commitments

This section sets out the detail of each of the 15 common performance commitments which Ofwat has put in place for AMP7. This means that our performance can be benchmarked against other water companies across some of the key services that we provide to customers.

We explain where you can find comparative performance on [page 47](#) **'Comparing our performance'**.

In this section we explain the 15 common performance commitments, and how we've performed against them. We also let you know what we have learned and how we will maintain or improve our performance going forward.



Water quality compliance (CRI)

Measuring the quality of our water

What is it?

This performance commitment shows how we measure the quality of our water. We test water samples, and the results give us a Compliance Risk Index (CRI) score. A lower score is better, and our score increases with each quality failure at all points in our water supply system.

Why is it important?

We want our customers to trust that the water we supply is clean, safe to drink and adheres to drinking water quality requirements.

This target is set at an aspirational level because no level of exceedance of water quality standards can be considered acceptable.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
0.00	4.83	✗	£3.47m

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	0.00	2.34	✗

Our performance

As with all water quality measures, CRI is reported on a calendar year basis. The company's CRI score for 2021 is rounded to 4.83 at two decimal places. The 2021 outturn represents a deterioration from 2.34 in 2020 but is similar to the score of 4.73 in 2019.

The CRI performance is understood to be an extreme variable year to year, as a result of the relatively complex combination of parameters included in the calculation.

It is relevant to note that the total number of samples exceeding regulatory standards was 66 in calendar year. This was an increase on the 54 sample failures in 2020, but a substantial improvement on the 87 failures in 2019. Of course, sampling programmes in 2020 were altered to avoid visiting customer properties during the pandemic. Hence, performance in 2021 represents historically low numbers of failures.

The relative deterioration in CRI performance was due to the specific type of sample failure that was detected. A substantial contribution to the year end value was due to six coliform bacteria detections at water treatment works (WTWs); nearly 60% of the total CRI impact for the year was due to these six detections.

Coliform bacteria were detected at Chellow Heights WTW, Cowick No.2 WTW, Elvington WTW, Keldgate WTW, Loftsome WTW and Nutwell WTW. Learning reviews have been undertaken and actions have been put in place to reduce the risk of future occurrences.

The detection at Chellow Heights WTW was particularly complex, with detections of the same organisms at low concentration for many weeks after the initial detections. Improvement were made to the protection of some exposed elements of the treatment process, improved operation of polyelectrolyte dosing was implemented, and a significant scheme of improvement of Rapid Gravity Filters including upgrade of backwash facilities and replacement of media have been implemented. At Elvington WTW, Loftsome Bridge, and Nutwell WTW defects were identified in integrity the relevant final disinfection tanks and have now been rectified.

While at Cowick WTW an issues was identified at a joint in pipework below ground level in the borehole itself. A repair was implemented once the borehole could be isolated, and inspections were made on the remaining boreholes at this site.

A significant contribution to CRI was also associated with raised levels of iron, representing the impact of mains sediment. Sheffield University have recently completed an innovative modelling exercise to identify the key causes of iron failures. This model has identified some counter-intuitive relationships and we are implementing the output of the iron risk map in proactive remedial activity.



Water supply interruptions

Reducing the length of interruptions to your water supply

What is it?

This measures the average time each property is without a water supply for interruptions lasting more than three hours.

We report this in hours, minutes, and seconds.

Why is it important?

We understand how much of an inconvenience it can be to be without water. It's important that we reduce the time that our customers are without supply. This performance commitment drives improvements to the efficiency of restoring supply to our customers after an incident.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
00:06:08	00:10:38	✗	£5.54m

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	00:06:30	00:07:14	✗

Our performance

This year, our performance of 10:38 minutes is a deterioration on our year 1 performance by 3:24 minutes.

This deterioration in performance was driven by a number of factors, the most significant being the large number of highly impacting events that occurred throughout the summer months. These events attributed to nearly 50% of reported interruption impact in the year. Throughout the summer, the volume of network failure events requiring an emergency response due to loss of water supply was high, this trend reflected each month seeing the highest, or second highest volume of emergency orders raised due to customer impacting events.

Another contributory factor in the deterioration in performance was the impact of Storm Arwen, which resulted in a 51.79 second impact across a number of simultaneous interruption events.

Significant interventions were made throughout the year to enhance incident response and mitigate the impact of significant network asset failure on the Interruptions measure. These interventions helped to stabilise performance in the second half of the year where, with the exception of Storm Arwen, performance was in line to achieve this performance commitment target.

Underlying performance against this measure remains strong and over latter six months of the year, performance has improved week on week. The measure was adversely impacted following three key events:

- Storm Arwen contributed 52 seconds,
- Graincliffe WTW outage contributed 28.29 seconds, and
- a major trunk main burst in Dewsbury contributed 50.79 seconds.

In relation to the effect of Storm Arwen, we are making representations to Ofwat on the basis that we were adversely impacted by the loss of power supply from Northern Powergrid (NPG) and NPG's response throughout the storm, which was declared as a major incident with the army drafted in to support. Despite the challenges presented by Storm Arwen our performance saw the majority of customer supplies restored in 3 days and small section of customers restored within 5.



Leakage

Reducing the water lost from our network as a result of leakage

What is it?

This measures the amount of water lost between our treatment works and our customers' taps.

It reports the percentage reduction of our leakage each year. In our 2019/2020 Annual Performance Report (APR) we reported our total baseline leakage level. This is a three-year average of annual values. It includes an average of 2017/2018, 2018/2019 and 2019/2020 leakage levels and is expressed in megalitres per day (Ml/d). The 2019/2020 baseline total leakage level is 315.3 Ml/d. Our targets represent a percentage reduction of that figure.

Why is it important?

It's important that we utilise all the resources that we have to continue to provide Yorkshire with a reliable supply of water. Reducing leakage means we use our water resources more efficiently and demonstrates the resilience of our network.

How did we perform?

Target	Per- formance	Target achieved?	Reward
7.4%	7.9%	✓	£209k

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	3.4%	3.5%	✓

Our performance

Our leakage performance remains strong with year on year reductions in the first two years.

Leakage out-turned at 283.1Ml/d in year, which is a 6.7Ml/d reduction on the previous year. This is a three-year rolling outturn of 290.5Ml/d against a target of 292Ml/d which equates to a 7.9% reduction from the baseline against a target of 7.4%.

A major investment in SMART network techniques is progressing well to continue reducing leakage in line with our 15% reduction commitment.

We plan to improve performance this year with the following approaches:

- Point of interest. To enable efficiencies across our detection resource we are improving our approach to point of interest detection. This should increase promotion rates and reduce time to find leaks.
- Customer side leakage. We have re-assessed our proportion of district metered area leakage attributed to losses on customer side with a study completed by Stantec. 29.9% of district metered area leakage is proven to be on the customer side. This is in line with our former estimate of 31.17% from a study completed in 2008/2009. In line with our measure 'Repairing and Replacing Customer Owned Pipes' we have established a specialist team of Customer Side Leakage Inspectors which will drive an improvement in this area.

- SMART proof of concepts. We are trialling a number of proof of concepts delivered in collaboration with the Smart Calm Resilient Network Strategy team; a combination of one-off projects to deliver a particular reduction as part of a trial before applying to the rest of our network.



Per capita consumption

Helping our customers to use water more efficiently

What is it?

Per capita consumption (PCC) is a measure on how much water the average person uses each day. It is reported as a percentage reduction of water usage each year from our 2019/2020 reported baseline level. Our baseline is calculated as an average of 2017/2018, 2018/2019 and 2019/2020 performance expressed in litres per person per day (l/p/d) and only covers household usage.

Why is it important?

It's important we use water carefully to make sure there's enough for everyone. We work with our customers so there is a better understanding of the way in which water is supplied and treated and taken care of. It's also important to us that our customers see the benefits of using less water where possible and we can support them. Reducing water usage mitigates possible long term supply and demand pressures and reduces the need for abstraction.

COVID-19

Due to the ongoing impact of COVID-19, our regulator, Ofwat, has taken the decision to assess this measure at the end of this AMP. This means the overall performance will be reviewed in 2024/2025. We will continue to report our performance annually against the targets that were set and provide analysis of the impact of COVID-19 in the Yorkshire region.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
4.9%	0.1%	✗	£0

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	2.4	-3.4%	✗

Our performance

In 2021/2022, our customers used an average of 131.5 l/p/d, which is a decrease of 9.7 l/p/d since the previous reporting year. The COVID-19 pandemic has resulted in significant changes in our customers behaviour and subsequently their water use with our customers spending more time at home.

PCC is measured on a three-year rolling average to account for any usage which exceeds the normal in a particular year but with COVID-19 usage has exceeded normal level since March 2020 which has impacted our performance and ability to achieve our PCC reduction targets. We're disappointed that we didn't achieve our three-year rolling performance target of 121.9 l/p/d, reporting 133.5 l/p/d in 2021/2022.

Household water usage was significantly lower in 2021/2022 than the previous reporting year. Last year, we observed customer behaviour slowly return to the pre-COVID 'norm'. International travel has largely re-opened, employees have been returning to offices, the retail and hospitality sector has re-opened, and schools remained open throughout the year. COVID-19 continues to impact PCC as new ways of working has seen many customers working from home either part or full-time. As customer behaviours are still normalising, it is difficult to forecast PCC given the unknown long-term impact on home-working arrangements.

In previous years the national and local lockdowns created changes in customer behaviour which led to increased water consumption. As homeworking continues into this reporting year, we expect that both measured and unmeasured PCC will remain elevated through to 2025 reflected by the long-term impact of COVID-19 on customer behaviour. We have and will continue to monitor our customer usage in-year with our two residential samples for unmetered and metered customers.

The ongoing impact of COVID-19 on PCC will depend on multiple factors but is expected to continue to decrease. While we anticipate that the long-term impact of COVID-19 will continue to challenge our ability to reach our targets, we have seen some reductions in water usage this year. We predict this will continue throughout AMP7 due to stabilisation of water use following COVID-19 and our increased focus on water efficiency through the introduction of the Water Efficiency Team and our Water Efficiency strategy.

Throughout 2021/2022, Yorkshire Water undertook various activities under its water conservation campaigns. We created over 7 million opportunities for customers to see and hear our messages and generated over 12,554 clicks to our water saving pages, our face-to-face branding has been reinstated in 2022 but throughout last year we focused our advertising on mediums accessible from home and we continued with our "Garden Getaways" campaign. Looking ahead for AMP7 we will be attending events to educate customer on water usage and providing tips for them to reduce their consumption. Alongside this we are going to reinstate our home visits with customers to improve their homes efficiency and discuss their consumption and provide information needed to reduce their usage. We have continued to send out our water saving packs to customers throughout 2021/2022.

We also increased our measured household properties, installing more meters this year which has a positive impact on water use. People in measured households on average used 45 l/p/d less water than those in an unmeasured household in Yorkshire. The number of residential households on our unmeasured household sample has increased and will continue to increase during AMP7 providing us with more data to accurately determine average consumption of all our unmeasured household properties in Yorkshire.

We ran a localised smart metering trial in the Sheffield area of our region during 2021/2022 which is still ongoing. This trial provided each household with a consumption report which detailed their usage and provided personalised tips for them based on their consumption. The control group has given us insight into customer consumption but also enabled customers to view our new customer usage platform and understand their consumption. This provides us with an opportunity to educate them through our tailored water saving tips. This trial has been run in partnership with Advisso and will continue to deliver customer insights from engagement sessions and customer focus groups, helping to shape our Water Efficiency strategy.

Mains repairs

Maintaining and improving the resilience of our below ground water assets

What is it?

This measure reports the number of repairs that have been made per 1000km of mains in our network.

Why is it important?

This measure demonstrates the resilience of our network and ensures we continue to maintain and improve our network and provide a reliable water supply to our customers.

How did we perform?

Target	Performance	Target achieved?
<183.6	169.8	✓

This performance commitment is penalty only, meaning only receive a penalty for poor performance and no reward for outperformance.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	186.1	215.0	✗

Our performance

We are pleased to report that we have passed this performance commitment and improved on our year 1 performance. Year on year our performance in this measure has significantly improved.

We performed 5,454 mains repairs this reporting year, which translates to 169.8 repairs made per 1,000km of network. Of these, 2,128 of these being proactive repairs to maintain our network and 3,326 being reactive in response to events.

We aim to continue to improve performance of this measure.

Unplanned outages

Maintaining and improving our above ground water assets

What is it?

This measure reports the percentage drop in our peak-week production capabilities. Essentially, it's when the amount of clean water we can produce is reduced temporarily due to our assets not working as expected. We measure the reduction in megalitres per day and report the overall reduction as a percentage.

Why is it important?

It's important that we maintain and improve our overground assets to provide a reliable supply of water to our customers.

How did we perform?

Target	Performance	Target achieved?
<4.42%	3.82%	✓

This performance commitment is penalty only. As we have achieved the target for this measure, there is no penalty but also no reward.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	5.12%	3.87%	✓

Our performance

Performance has been very similar to last year with only 0.05% difference in the outturn, however still achieved the target for this year despite some key outages throughout the year. A loss of a key filter at Keldgate Water Treatment Works (WTW) in August resulted in a loss of 7.3 mega-litres per day (ML/d) for nearly a month and a substantial loss of 10 ML/d at Longwood WTW due to the failure of pressure pipework that resulted in asset loss for three weeks. In addition, a substantial outage at Elvington in September 2021 caused by the loss of two key assets simultaneously reduced output by 36.9 ML/d for several weeks.

In October 2021 Longwood WTW had an asset failure which resulted in a loss of 6.1 ML/d for 3 weeks. At a similar time, Tophill Low WTW had a failed Powder Activated Carbon plant which meant a large outage (31.1 ML/d) two days.

Throughout December, there was a number of asset failures that caused a sharp rise in unplanned outages.

Our company level peak week production capacity is 1571 ML/d. Planned outage is when assets are taken out of service or become unavailable due to a planned intervention, such as planned maintenance. Our planned outage is 23.81 ML/d. Our unplanned outage is 62.59 ML/d.

Risk of severe restrictions in a drought

Improving our long-term resilience and lowering risks to water supply

What is it?

This performance commitment measures how many of our customers would be at risk of experiencing severe water restrictions in a 1-in-200-year drought, on average, over the next 25 years. We report this as the percentage of customers who may be at risk if such an event should occur.

Why is it important?

We understand the effect it has on our customers when we must put restrictions in place to maintain water supply in our region. It's important that we effectively review our supply and demand analysis to identify any risks to our customers to help us to prevent restrictions being applied. To reflect the importance of this measure, the target throughout 2020-2025 is zero.

How did we perform?

Target	Performance	Target achieved?
0.0%	4.0%	✗

This performance commitment is reputational only and therefore holds no reward or penalty.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	0.0%	0.0%	✓

Our performance

The percentage of population affected by severe drought restrictions in a 1-in-200-year drought event is 4%. This is the average based on the 25-year period for our baseline planning scenario. This reflects the population at risk of the average supply demand deficit over the 25 years before any of the solutions and potential intervention to prevent this.

We have plans in place to reduce leakage substantially and address the supply demand deficit to ensure this measure is reduced to 0% in future years.

Priority services for customers in vulnerable circumstances

Improving services for our vulnerable customers

What is it?

The Priority Services Register (PSR) offers free extra services to our vulnerable customers who need them. This performance commitment has three elements that are measured and reported separately, however all three must be achieved to pass the performance commitment overall.

Reach: percentage of households that we supply with water and/or wastewater services that are registered on our PSR.

Attempted contact: percentage of individual households on the PSR that we've attempted to contact over a two-year period.

Actual contact: percentage of individual households on the PSR that we've actually contacted over a two-year period.

Why is it important?

It's important that we continue to identify customers in our region that may need additional support from us. We also want to make sure that those on the PSR are receiving services that are still appropriate for them if, for example, their circumstances have changed. Keeping our data compliant and up to date is key to ensuring our customers receive adequate services.

How did we perform?

	Target	Per- formance	Target ach- ieved?
Reach	5.8%	3.9%	✗
Attempted contacts	90.0%	45.2%	✗
Actual contacts	35.0%	14.3%	✗

This performance commitment is reputational only and therefore holds no reward or penalty.

Previous performance

2020/2021	Target	Per- formance	Target ach- ieved?
Reach	4.0%	3.5%	✗
Attempted contacts	45.0%	46.3%	✓
Actual contacts	17.5%	17.3%	✗

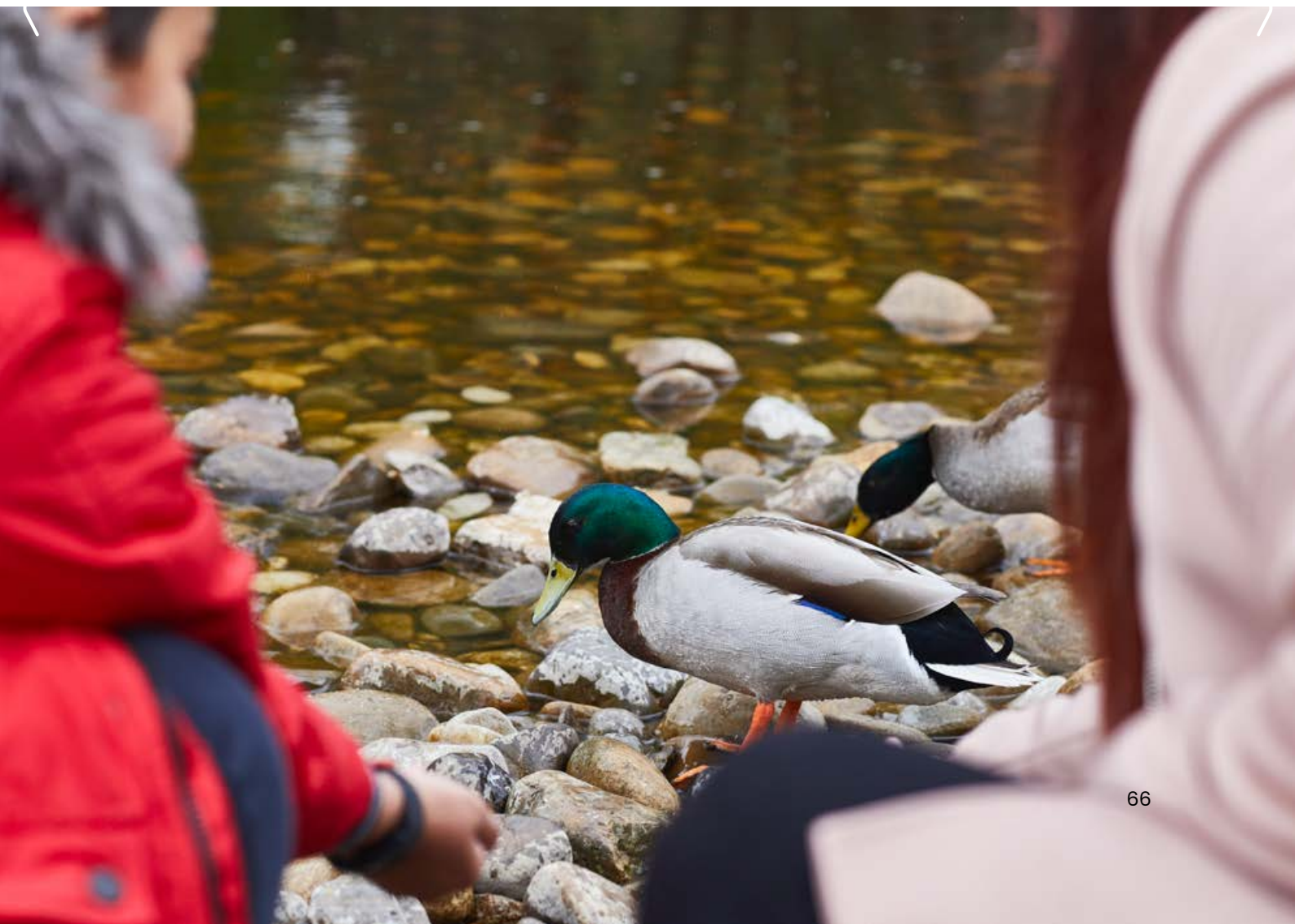
Our performance

The 'reach' element of this performance commitment was originally based on the understanding we'd have an industry wide data share with energy companies in place by 2020. This has been far more difficult to put in place than originally thought, and still isn't available. It's hoped it will be in place in the coming financial year. In the absence of the data share we've been promoting our PSR through all channels available to us. It's on every annual bill that goes to every household in Yorkshire. We run communication campaigns on social media and radio to promote the service to customers and, this year, we launched the Vulnerability Partnership Fund. This is a fund that allow us to offer small grants, of up to £5k, to charities across Yorkshire who work with communities we find it hard to engage with through traditional means.

We are currently working with eight charities including Age UK, DIAL Leeds and Groundwork, who help us offer out serves to their members. We also offer our PSR services on any contact we have with a customer though our contact centre where we recognise there is a need.

The data checking element of this performance commitment has been something we haven't been able to work on in the way we'd have liked. The very high demand we've seen in our contact centres throughout 2022, with more customers asking for help paying their bills, has led to us to focus on this demand as a priority.

We recognise this isn't where we want to be so we are now working with a third-party company to ensure we get data checks completed during 2022/2023 and that we can meet this element of the performance commitment going forward.



Internal sewer flooding

Reducing disruption caused by internal sewer flooding events

What is it?

Internal flooding is when an escape from the sewerage system enters a building or passes below a suspended floor. This measure reports the number of internal sewer flooding events each year per 10,000 sewer connections. This includes events that are caused by severe weather.

Why is it important?

We know that internal flooding incidents have a big impact on the lives of our customers, and we understand how unpleasant these events can be. It's important to us that we reduce these incidents and the effect they have on our customers.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
<1.63	2.83	✗	£10.12m

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	1.68	3.34	✗

Our performance

This section details our performance for both internal and external sewer flooding. This is because the same teams work on the measures and so the improvement plans and performance are intrinsically linked. You can see our external sewer flooding (ESF) performance on [page 106](#).

Though we have seen an improvement in the number of internal sewer flooding (ISF) events, we have not made sufficient improvement to reach the required target. There are a total of 664 incidents being reported this year compared to 778 reported last year.

Whilst we have improved performance, we also continue to be challenged by severe weather with eight ISF events and 27 ESF events attributed to this. Our performance in May and July was impacted heavily by rainfall. May was atypical, experiencing rainfall on all but seven days of the month. Five of these days proving extreme with 10mm or more of rainfall, and three days proving severe at 6mm – 10mm. July saw the region experiencing five days of extreme rainfall at 10mm or more, and one day proving severe at 6mm – 10mm. February also impacted our performance significantly, experiencing rainfall on all but eight days. Six days proving extreme with 10mm or more, and five days proving severe with 6mm – 10mm.

We have continued to invest significantly to transform our approach to sewer flooding at every stage in the incident process.

The changes and improvements can be categorised into:

1. Elimination at source
2. Enhanced initial response
3. Elimination of repeats
4. Management information & governance.

There will be further improvements delivered throughout the AMP to ensure the performance improvements are not only sustained but built upon.

1. Eliminate at source

To reduce the number of initial flooding incidents at customer properties we have invested £17.8m in year two in proactive schemes to prevent initial flooding incidents occurring and carried out sewer investigations at 289,707 properties accessing 248,395. This was against our own target of 280,000 visited.

Of the visited properties 6,312 properties had a history of internal sewer flooding and 254,854 properties considered at risk of sewer flooding or in the vicinity of properties with a history of sewer flooding. We carried out sewer investigations at 28,541 properties with a history of external sewer flooding (ESF).

We have increased proactive sewer investigations and repaired 3,599 defects identified following these investigations. We proactively installed 2,602 access gullies to support future issue rectification.

We carried out desilts of 160km sewer and invested a further £23.2m in the reactive maintenance of our network.

We have expanded our Network Protection resource and capabilities, with primary activity types aimed at reducing sewer flooding risks, including:

- **Education and engagement.** We carry out both individual and geographical area-based engagement visits to domestic and commercial customers. These can be reactive (following an incident) and proactive (in high-risk areas). Our aim is to give customers a greater understanding of how their activities impact on the sewer network and how incorrect disposal of food waste, fats, oils and greases, and wipes can lead to blockages which cause flooding and wider environmental impact. In the last year, we have carried out over 19,000 domestic engagements, and visited 4,300 food service establishments to carry out kitchen audits and provide advice on good kitchen practices.
- **Monitoring.** Where we can demonstrate that a commercial customer has had a negative impact on the performance of the sewer network through their activities, we conduct different levels of engagement including support and advice on the impact to the sewer system. The main aim of this to change behaviour so food service establishments can put effective grease management and kitchen practices in place to prevent further impact. As this approach becomes embedded, we are starting to see positive changes. In the last year, 60 businesses that previously caused sewer flooding incidents now have effective grease management equipment installed.

2. Enhanced initial response.

A key area of improvement in this area is the training and investment in our employees who respond to incidents. We have enhanced our framework for these roles and delivered an enhanced and efficient operating model.

Our 'Fast Track Civils' project supported by our service partner, Above, has continued to transform our response to incidents by ensuring response in less than 48 hours for incidents that require excavation and more complex solutions.

3. Elimination of repeats.

Our repeat rate has dropped consistently over the last 12 months, particularly on internal sewer flooding. Moving towards zero tolerance for repeats, we have put the following mechanisms in place.

- We have improved our focus group (escape hubs) and made them an enhanced tool to manage and review incidents. Each of our 16 operational areas host, at a minimum, weekly escape hubs, using their personalised hub tool.
- We introduced a 'Risk Reduction Hub' and evolved this for all operational managers to review all repeat events. This approach drives continuous improvement, wider scrutiny, and consistency to all who are directly involved in flooding response, investigation, and management.
- An internal assurance process is in place that reviews the various states at which an incident is, ensuring an improvement in the length of time taken for resolution. It also allows us to identify themes and triggers interventions for areas that may require support.

4. Management information and governance.

To compliment these far-reaching changes and developments in our approach to preventing and managing flooding incidents, we have built a thorough governance framework which defines what we do operationally. We continue to improve, enhance, and standardise our reporting processes and work with our data science teams to provide effective management information at every level.

On-going improvements

We have several projects progressing which should improve our performance in relation to sewer flooding. We have an on-going project to try and better assess where there are private issues with sewer flooding. We will invest a further £16.9m into our proactive sewer network maintenance project with an improved approach in targeted areas preventing incidents due to blockage removal and pre-emptive repair of defects. This approach will have benefits to both ISF and ESF measures.

We will also increase our Customer Sewer Alarm Monitors by a further 15,000 and further improve our reporting.

We expect performance in our sewer flooding measures to continue to improve.



Pollution incidents

Improving the quality of the environment

What is it?

This performance commitment measures the number of pollution incidents caused by our wastewater assets, for every 10,000 km of our wastewater network. This is a calendar year measure from January to December. The measure includes category 1, 2 and 3 incidents as defined by the Environmental Agency (EA) guidance.

Why is it important?

We know our customers care about the environment and take an interest in this measure, especially if we are not performing well. Any pollution incident is disappointing and so it's important to us to reduce the number of events that occur and improve the quality of our environment.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
23.74	27.36	✗	£2.48m

Previous performance

Year	Target	Per- formance	Target achieved?
2021	24.51	24.00	✓

Our performance

This year we are reporting 126 category 3 incidents and six category 2 incidents. Whilst we did not hit our target this year there were some significant regulatory changes that took place which had an impact on our reported performance.

Prior to this year the EA had always deemed issues with the power distribution network which resulted in a pollution from one of our assets as a non-Yorkshire Water incident. This stance was changed during 2021 and these pollution incidents included deemed attributable to Yorkshire Water by the EA.

We also saw an increase in the number of compliant or consented incidents deemed by the EA as impacting. These are incidents where the Yorkshire Water asset is operating in line with the permit conditions issued by the EA but they are still deemed as to be having an impact on the environment.

Finally, we saw a change in regulator practices when incidents were categorised. Historically categorisation is based on actual impact to the environment, this year was the first time we saw other factors, such as response times, influence the categorisation.

Had it not been a change in approach then we believe we would have met our targets.

Our reporting processes have been built to accurately reflect and comply with the current EA guidance as set out within their published instruction, 1602: Recording and categorising water industry self-reported pollution incidents.

Through collaboration and dialogue with other water companies we also have confidence that our reporting procedures mirror those throughout the industry.

We're aware of the EA's intention to amend and update the current self-reporting guidance, Yorkshire Water having provided feedback to the EA's disclosed v7 draft during recent consultation.

Within the proposed guidance there is a greater expectation that water companies consider the pass forward flows from assets with consents to spill. The impact of the new guidance on YW will be determined by the thresholds applied surrounding this guidance. Currently 98.3% (223 of 227) of sites are achieving full flow to treatment (FFT). The four sites not achieving FFT have actions plans and have been communicated to the EA.

To ensure our procedures continue to align with the updated guidance and meet best practice our approach is as follows:

- We will continue to test our interpretation with the industry by taking an active role in the newly established WaSC 1602 Review Group.
- Continued liaison with the Senior EA Officer for Yorkshire.

Our current processes to assure compliance with our FFT requirements is managed in two ways:

1. Q95 Assessment – The Q95 assessment reviews maximum flows achieved over a 12-month rolling period and identifies sites that fail to achieve FFT at the 95%ile (18 days of achieving FFT). All sites failing this assessment are communicated to the EA.
2. Passed forward flow (PFF) Assessment – This is a proactive process, reviewing performance against FFT/PFF whilst site has an active spill. All instances that indicate potential non-compliance have an investigation raised and remedial action carried-out if required following the investigation. Where conclusive evidence indicates a clear failure to achieve PFF or early spill due to a process failure these will follow our pollution reporting processes., Where sites are identified as not been capable of achieving PFF these are reported to the EA regional department.

Whilst these processes provide a level of assurance around pass forward flow compliance, the delivery of the U_MON3/4 scheme in AMP7 will give us the ability to accurately report against this guidance.

Risk of sewer flooding in storm

Reducing the flood risk to our customers due to severe weather events

What is it?

This measures the percentage of our customers who would be at risk of sewer flooding from a 1-in-50-year storm, based on modelled predictions.

Why is it important?

It's important that we can identify where there is a risk of sewer flooding so we can put plans in place to protect our customers and reduce the effects of severe weather events.

How did we perform?

Target	Performance	Target achieved?
22.20%	5.65%	✓

This performance commitment is reputational only and therefore holds no reward or penalty.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	22.20%	5.60%	✓

Our performance

Following enhancing our reporting of this metric the overall figure of proportion of population at risk of sewer flooding in a storm has increased slightly to 5.65% from 5.60% last reporting year but remains well below our target for the second consecutive year.

This change can be attributed to change in population growth forecast data. This dataset was updated to ensure that the metric uses the same population data set as all other areas of Yorkshire Water and aligns with the business strategy on population data.

This metric continues to align with the processes and data used in our Drainage and Wastewater Management Plans, which are currently in production.

Sewer collapses

Maintaining and improving the health of our below ground wastewater assets

What is it?

This performance commitment measures the number of sewer collapses per 1000km of the sewer network. A sewer collapse is where a structural failure has occurred to the pipe that results in a service impact to a customer or the environment and where action is taken to replace or repair the pipe to reinstate normal service.

Why is it important?

It's important that we maintain our underground wastewater assets as we recognise that a failure of these could have a detrimental effect on our customers and the environment. In order to improve services to our customers for now and the future, we are working hard to reduce the number of sewer collapses on our network.

How did we perform?

Target	Performance	Target achieved?
<17.55	11.71	✓

This performance commitment is penalty only, meaning only receive a penalty for under performance and no reward for outperformance.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	18.26	15.10	✓

Our performance

The 2021/2022 Performance improvements reflect our continued commitment to increasing investment in our wastewater network to deliver improvement across all our wastewater performance commitments. Below is a summary of the outcomes achieved from last year, however this is actually the fourth year of our investment journey that started with our Upper Quartile program of improvement through 2015–2020.

- Invested £17.8m in proactive schemes on sewer network.
- Carried out sewer investigations at 289,707 against a target of 280,000 properties, accessing 248,395.
- Increased proactive sewer investigations from the 168,313 properties visited in year 2020 and repaired 3,599 defects identified following these investigations.
- Invested a further £23.2m in reactive maintenance of our network.

In 2022/2023 we are moving our approach forward and targeting high risk properties where collapses are more likely. The program is looking to survey 156,524 properties to undertake CCTV, cleansing and defect resolution. This approach will further enhance our ability to proactively identify collapses and defects which will allow us to intervene prior to any impact to our customers occurring.

Treatment works compliance

Maintaining and improving the health of our above ground wastewater assets

What is it?

We have permits that control our discharges into watercourses. This performance commitment measures the percentage of our treatment works that comply with their discharge permits.

Why is it important?

We want to make sure that our above ground assets are operating as expected and are compliant with their discharge permits. We know it's important to our customers that we limit our effect on the environment and, if we do have an impact on the environment, we are open and transparent about what we happened and how we will improve.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
100.00%	99.03%	✗	£0

This performance commitment is penalty only, meaning we only receive a penalty for poor performance and no reward for outperformance. We receive a penalty when we go under 99%.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	100.00%	99.04%	✗

Our performance

We have maintained our performance in this area with three failing works which keeps us within the threshold for the measure, but we are still not quite achieving the 100% compliance target.

The three failures we received on this measure were from Market Weighton sewerage treatment works (STW), Driffield STW & High Royd STW. We have carried out full root cause analysis on these sites to ensure we incorporate the learning into our improvement plans and prevent reoccurrence.

- Market Weighton was caused by a failure of the scraper in the final settlement tank, which resulted in build-up of solids in the tank and on the surface. This was carried over into the final effluent when the scraper was restarted. A review of process amendment guidance has been reviewed and re-issues to the business.
- At Driffield an iron failure was associated with a build up of solids in the Biological Aerated Flooded Filter (BAFF) unit due to a backwash issue. The sample failed as the unit came back into service following a successful backwash. The control software has been reviewed and enhanced with new alarms being set up to prevent recurrence.

- At High Royd we have taken enforcement action against a third-party as an excess load had been received within the catchment. This was challenged with the EA but rejected.

We have number of key streams of work that we are delivering which will improve our resilience and enhance our current controls to ensure we continue to drive improvement in this area. These build into our wider improvement plans for pollution and permit compliance:

1. Process Improvements & Governance
2. Training & Competence
3. Data & Technology
4. Maintenance & Investment
5. Risk & Assurance

These areas are key to ensure our preventative controls and detective controls are enhanced and reflect the learning from the successful projects on ultraviolet and water treatment works and the critical factors identified at the three wastewater treatment works.



C-MeX

Improving the customer service we provide to our residential customers

What is it?

The Customer Measure of Experience (C-MeX) metric is designed to measure how satisfied our household customers are with level of service we provide. It's calculated from two surveys in which customers can rate their experience: the Customer Satisfaction Survey (CSS) and the Customer Experience Survey (CES).

Customer Satisfaction Survey: a survey of customers who have had recent contact with their water company asking them about their experience.

Customer Experience Survey: a survey of randomly selected residents within the region the water company services asking them how satisfied they are with their services. These customers do not have to be the account holders but must be over 18.

Both surveys are completed by agents appointed by Ofwat.

We are ranked against 16 other water companies with number 1 being the best performance and 17th place being the bottom.

Why is it important?

Our customers are at the heart of everything we do, and we are constantly striving to improve the service we provide. Customer feedback allows us to make plans and concentrate our efforts to improve our services for the better.

How did we perform?

Position	Score	Improved?	Estimated penalty
10th	80.41	×	£15k

The reward/penalty on this commitment is estimated as a final evaluation is completed by Ofwat which will confirm the final penalty figure. We will update this in our re-publication of the APR in February 2023.

Previous performance

Year	Position	Score
2020/2021	8th	82.78

Our performance

We ranked 10th out of 17 companies overall, lower than our 8th place position in the previous year. This was largely driven by a Customer Service Survey score that was 2.6 points lower than previous the year. Our Customer Experience Survey score also dropped, by 2.2 points, however relative to other companies we improved in this area, moving from 9th to 5th position.

Our ability to deliver consistent standards of customer service has been disrupted this year by several factors. We experienced significant severe storm events, including three named storms in one week in February, resulting in high volumes of issues on our network. At the same time, we've also had to deal with a challenging labour market this year, we have struggled to recruit colleagues for our Customer Field Services team owing to the national shortage of HGV drivers. We have also had on-going staff absence as we returned to post-COVID work environment.

For our billing service, we saw scores reduce by 1.6 year on year. This was down to high contact volumes and dissatisfaction relating to bill increases which have been driven by increased consumption with more people are working from home.

Despite the challenges, we have made significant improvements to aspects of our customer experience this year. We introduced a new online account page and self-serve functionality to allow more customers to better manage their bill online and made enhancements to our real-time incident map, which allows customers to see where incidents are happening in their area. We've also introduced new operating structures in both our Customer Field Services and Customer Management Centre teams. These changes will enable a more reliable, higher quality experience and have already started to deliver better outcomes for customers, such as reduced call waiting times and complaints.

We have experienced some early benefits to customer experience from our Integrated Planning, Scheduling & Logistics Transformation Programme, with pilots focused on first time resolution and better customer communication having positive results.

For the next 12 months, our efforts will focus on the three improvement areas which we know from customer feedback that we need to get right more often:

- Managing customer expectations. Better communication, understanding of the customer's needs and explaining what will happen next.
- Resolution; fixing issues on the first contact or visit, and making the customer aware of the next steps if this is not possible.
- Timescales; prioritising work based on the impact to the customer and responding consistently and quickly.

We can confirm that our communications from our customers are by email, telephone, social media, self-service account access, webform, two-way text messaging and letter.

By focusing on a service customers can rely on, we hope to deliver a consistently better experience in 2022/2023.



D-MeX

Improving the customer service we provide to our developers

What is it?

The Developer Services Measure of Experience (D-MeX) performance commitment is designed to measure the levels of customer service that we deliver to our customers who are considering or undertaking a new development.

Our overall D-MeX score is calculated from two components that contribute equally:

1. a **qualitative D-MeX score**, based on the ratings provided by developer services customers who transacted with us throughout the reporting year to a customer satisfaction survey; and
2. a **quantitative D-MeX score**, based on our performance against a set of selected Water UK performance metrics throughout the reporting year.

The survey is conducted by an independent agent appointed by Ofwat.

Why is it important?

It's important that the services that we provide to developers of all sizes are the highest standard, and so understanding how we are doing helps us drive improvements and focus on where we could do better.

How did we perform?

Position	Score	Improved?	Estimated penalty
17th	55.08	✗	£3.395m

The reward/penalty on this commitment is estimated as a final evaluation is completed by Ofwat which will confirm the final figure. We will update this in our re-publication of the APR in February 2023.

Previous performance

Year	Position	Score
2020/2021	16th	62.25

Our performance

We knew this year was about stabilising Developer Services under control and setting us up for success for future years. In early 2021 we experienced some dramatic shifts in temperature that led to an increased number of bursts across our network. It was important we found and fixed them as soon as we could to help secure water supplies for all our customers across the region.

As a result, we used resources that were deployed across other areas of work, including Developer Services causing a backlog impacting performance in this measure.

Our backlog was further compounded as we moved to a new service provider in July 2021. They experienced difficulties recruiting the required number of field operatives to meet our demand at the start of the contract, as a result of the challenging labour market.

Over the remainder of the year we have engaged and consulted with Ofwat to ensure our recovery plans were transparent. We have worked hard to clear all backlogs deploying additional resource and investing in process and system improvements. We saw complaints reduce from 1,100 in October 2021 to less than 20 by the end of the financial year. As a result of the work completed, we have seen a 32% improvement in our quantitative D-MeX score since April 2022 with a continuing upward trend. We are confident we have created the right conditions for improvement in the future.

Bespoke performance commitments

We've engaged with 30,000 customers to understand individual lifestyles and how they shape what customers want, need and expect from us. We've listened to customers' aspirations for us and developed a plan that puts excellent and efficient service front and centre of our ambitions.

To respond to our customers' feedback, we developed a package of 29 performance commitments that are unique for Yorkshire Water. They align with our ambitions and challenge us to change the way we work to meet both customers' expectations and the complex long-term challenges that we'll face as a business during AMP7.

In this section, we explain the 29 bespoke performance commitments that we've developed and how we've performed against them.



Working with others

Collaboratively working with third parties to improve Yorkshire for our customers.

What is it?

This performance commitment measures the projects that are completed collaboratively with independent not-for-profit independent agencies, organisations or individuals. We call these projects 'partnership projects'. All partnership projects selected will go through the same business approval processes as any other projects within Yorkshire Water and have the same level of scrutiny and challenge. Only partnership projects with a clear net-benefit to our business objectives and customer outcomes will be selected.

In AMP7 we have been set a more stretching target for this measure as we must exclude any land-based partnership projects that are counted towards our land conserved and enhanced performance commitment. We must also quantify the additional benefits achieved by working in partnership over and above those that would have been achieved by working alone. We will quantify these additional benefits using our Six Capitals Framework and have this independently reviewed at the end of AMP7.

Why is it important?

These projects contribute direct financial or in-kind support, to capital or operational programmes, investigations, and feasibility studies. Working in partnership with others means that we can deliver more for our customers and the environment. The reward from achieving this performance commitment is ring-fenced to be re-invested in more partnership projects.

How did we perform?

Target	Performance	Target achieved?
9	16	On track

Our performance against this measure is calculated cumulatively over the AMP (from 2020-2025). This means our overall reward or penalty will be evaluated and reported in 2025.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	3	7	✓

Our performance

This year we have successfully met both the annual and cumulative target for this measure. We have delivered 9 projects contributing a total of £263,713 of both financial and in-kind support to a range of projects, from habitat enhancements to schemes to reduce flood risk.

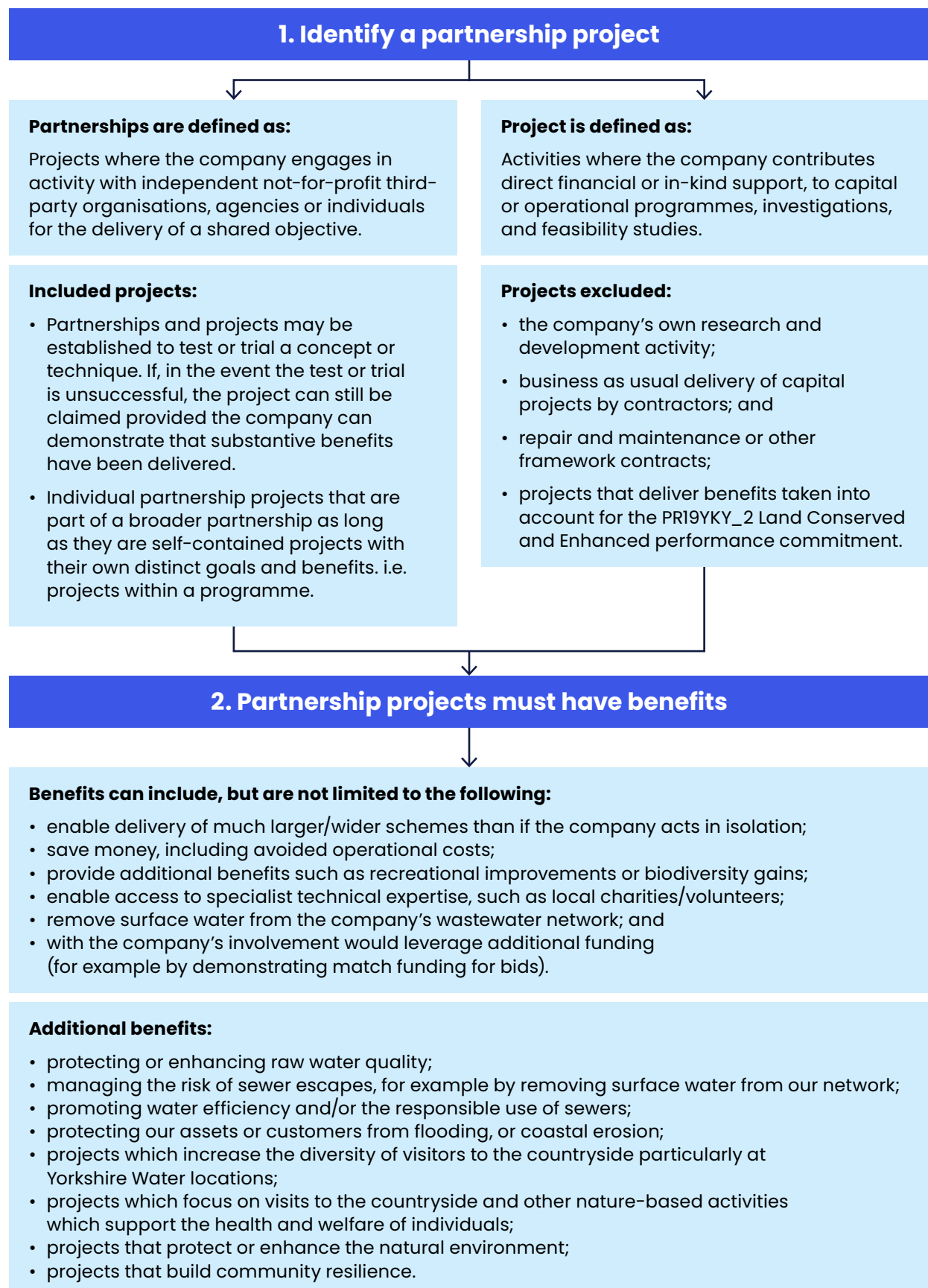
We continue to build relationships and explore different ways of working with a range of partner organisations. This year we have supported two "Friends of" groups. Whilst such partnerships may be small, they can be extremely effective at delivering outcomes.

Our Living with Water partnership is maturing and now starting to deliver tangible on the ground improvements, such as the development of the Wilberforce Flood Hub. This provides an exciting new hands-on learning environment for school children, scout packs, community groups and others. Here they can learn about flood risk and the practical steps we can all take to become more resilient.

Both the above areas of work have benefitted from having several years of preparation to build relationships, establish ways of working and importantly, both our Biodiversity Fund and the Living with Water partnership have ring fenced budgets that are dedicated to achieving defined outcomes specifically by delivering in partnership.

Working with others

Performance Commitment Eligibility Criteria



3. Partnership projects go through business approval process

Business approval process is defined as:

- must be the same business approval processes as any other projects within the company and have the same level of scrutiny and challenge.
- only partnership projects with a clear net-benefit to meet the company's business objectives and customer outcomes will be selected.
- a partnership project must include the following information:
 - partners involved;
 - total costs of the scheme;
 - contribution required from the company (financial or otherwise);
 - timescales for completion;
 - criteria for determining a successful outcome;
 - proposed project steering group (including third party members) including relevant skills and qualifications; and
 - project governance.

Business approval process will check the partnership project meets the eligibility criteria

(Full list of eligibility criteria will be documented in advance of the 2020/2021 reporting year and will be published in the company's Annual Performance Report (APR). The Yorkshire Forum for Water Customers will provide assurance that is appropriate.)

Eligibility criteria includes all the information in Steps 1-3 including:

- projects should have local or community benefits, we cannot fund projects outside our operational boundary (which largely matches the Yorkshire & Humber Government Office Boundary).
- we will carefully consider projects which resolve a long-standing issue, or which are the right thing to do, but which fall outside our regulatory business and what we normally fund.
- we will consider projects which build capacity within partner organisations (i.e. skill development, sharing good practice, secondments and mentoring).

Accepted

Rejected

4. Deliver partnership project

5. Is project successful?

Partnership projects completed on or before the 31 March will be reported in that year.

Each partnership project will only be considered to contribute to the performance commitment if it meets the published criteria.

The Yorkshire Forum for Water Customers will provide assurance on this.

Some partnership projects will deliver benefits upon completion. Others may take longer to achieve measurable benefits. In these cases, projects will be considered completed when the project steering group agrees that the substantive benefits of the partnership project have been delivered.

Counted

Not counted

6. Report information

The company will report cumulative progress on an annual basis through its Annual Performance Report, setting out if it is on track to achieve the cumulative 2024/2025 performance commitment level. Any outperformance payments will be calculated and applied based on the cumulative total in 2024/2025.

The company will commission and publish a report at PR24 by an appropriately qualified third party that estimates the additional benefits to customers delivered from the company working with third parties as opposed to what the company would have achieved on its own. It will also set out any learning that would increase the benefits of partnerships in the future.

The company will maintain documented reports that set out the benefits delivered from each partnership project and how these have been determined.

Land conserved and enhanced

Improving our land management and biodiversity activities

What is it?

This measures the cumulative area of land conserved and enhanced in the company's region through and management and biodiversity focused projects and investments on land owned, and not owned, by the company in the 2020–25 period. It includes the following statutory programmes:

- Site of Special Scientific Interest (SSSI) programme;
- Local Wildlife Sites or similar, programme;
- Other schemes benefitting biodiversity (for example, delivering best practice land management schemes); and
- 'Beyond Nature' land management.

These projects must be signed off by the relevant agencies such as the Environment Agency, Natural England or another recognised environmental non-government organisation. We report this by the number of hectares of land affected and improved by our projects.

Why is it important?

It's important that we do whatever we can to preserve and improve our natural environment. Working with other agencies to improve the way land is managed is vital to ensuring that we improve biodiversity and make the region better for our customers and future generations to enjoy.

How did we perform?

Target	Performance	Target achieved?
6096	6,656	On track

Our performance against this measure is calculated cumulatively over the AMP (from 2020–2025). This means our overall reward or penalty will be evaluated and reported in 2025.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	3048	3084	✓

Our performance

The target for the SSSI's is to work towards restoring and maintaining 11,339 ha of SSSI, regardless of Yorkshire Water ownership. No amount of SSSI area was claimed in 2020/2021 but the assessments that have been undertaken amounts to 2,774 hectares delivered in this reporting year.

The aim of Beyond Nature® is to have 10,000 hectares of land signed up to a management plan by the end of March 2025. Some of this land will also be designated as Sites of Special Scientific Interest (SSSI), and is therefore already included in the SSSI part of this measure. The overlap is estimated to be 6,265 hectares but this will not be counted under the Beyond Nature® reporting, to prevent double counting. The target for Beyond Nature®, excluding the SSSI areas, is 3,735 hectares. In 2020/2021, we claimed 3,084 hectares of Beyond Nature®. In 2021/2022, this has increased to a total of 3,881 hectares.

We have started work on 24 biodiversity schemes that will help us deliver the 40 hectares target for this work stream. This includes:

- Supporting the Calder Rivers Trust in the re-naturalisation of Black Brook, on the Middle Calder.
- Alongside Northumbrian Water, playing our part delivering the National Lottery Heritage Funded Tees–Swale Naturally Connected Partnership. This will deliver large scale habitat restoration across over 800km² in the Yorkshire Dales National Park and Teesdale.
- Helping the RSPB to install new water management equipment to benefit birds at Old Moor nature reserve in the Dearne valley.

The biodiversity schemes fall under our WINEP programme and will be due for sign off in March 2025 when we will be formally claiming against the target.

Work has also started on our Local Wildlife Site programme against the 125 hectare target. We have worked with internal and external stakeholders to identify a shortlist of 19 project sites and worked closely with the Environment Agency and Local Authority biodiversity specialists to make sure our plans are proportionate. Habitat enhancement works have now been undertaken at several sites such as Tadcaster Brickyard, Royd Moor, Midhope, Rivelin and Underbank reservoirs, and also works at Timble Ings though a successful water vole reintroduction. This is another Water Industry National Environment Programme (WINEP) project that will only be signed off in March 2025 by the Environment Agency.



Integrated catchment management

Developing integrated catchment plans that improve our environment

What is it?

The performance commitment measures the percentage of catchments we operate where, working with stakeholders, the company implements the 'Natural Capital Operator' model in the 2020–2025 period.

Implementing this model means that the systems operator provides a central oversight and management system to ensure optimal and sustainable use and management of natural capital, and to coordinate investment and management actions.

Catchments are selected based on where we can demonstrate;

- we have an operational presence within the catchment (for example water abstraction and wastewater processing),
- there will be a clear benefit for our customers; and
- there is adequate opportunity to gather the required information to drive change.

Plans must be developed, consulted upon, and agreed with stakeholders including Natural England, the Environment Agency, the relevant Catchment Based Approach (CaBA) partnership, Local Nature Partnership, the Yorkshire Water Biodiversity Advisory Panel; and external regional stakeholders, such as Wildlife and Rivers Trusts.

Why is it important?

Implementing this model delivers multiple benefits to our customers including improvement to water quality, enhanced biodiversity, reduced flood risk, resilience to climate change and greater community engagement with their local river in a cost-effective manner.

How did we perform?

Target	Performance	Target achieved?
0%	0%	On track

Our performance against this measure is calculated cumulatively over the AMP (from 2020–2025). This means our overall reward or penalty will be evaluated and reported in 2025.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	0%	0%	✓

Our performance

This measure looks at long term schemes and strategies that will be realised towards the end of the 2020–2025 period. This is reflected in our gradual target which rises to 2.6 in year three of this AMP. We are currently reviewing three plans to be developed across the next three years.

Length of river improved

Improving the health and aesthetics of our rivers

What is it?

This performance commitment measures the cumulative length of river improved, in kilometres, as a consequence of completed improvement schemes. These schemes have regulatory and legislative drivers and improvements are made under clean and wastewater obligations.

This measure includes schemes that are completed as part of our Water Industry National Environment Programme (WINEP) and non-WINEP schemes. All schemes must be signed off by the Environment Agency (EA).

Why is it important?

These schemes improve the quality of rivers for river users enhancing opportunities for recreational and other activities. It also measures river health to ensure that water can be abstracted from rivers and lakes for our clean water treatment works, without any negative impact on the environment.

How did we perform?

Target	Performance	Target achieved?
45.6km	50.08km	✓

Our performance against this measure is calculated cumulatively over the AMP (from 2020-2025). This means our overall reward or penalty will be evaluated and reported in 2025.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	0.0km	0.0km	✓

Our performance

We have delivered 45.6km of wastewater related schemes and 4.5km of clean water schemes that contribute to this measure.

There are a total of 114 obligations which deliver this measure across the 2020-2025 period and our delivery plan assurance group monitors these to make sure they are achieved.

Biosecurity implementation

Protecting our natural environment

What is it?

Biosecurity represents reasonable and practicable measures to prevent the spread of harmful organisms, such as plants, animals, fungi or pathogens. There is an emphasis on those organisms listed as invasive species. This performance commitment measures the number of Pathway Management Plans that we implement.

The Pathway Management Plans must have specific success measures which are independently reviewed and agreed with the Environment Agency. The plan is only considered completed when it has been signed off by the relevant regulators and a third-party assurer. We will also review the engagement and learning across the business in order to shape future policies.

Why is it important?

We want to protect and improve the natural environment for our customers and future generations by reducing the spread of invasive species. We want everyone to continue to enjoy Yorkshire.

How did we perform?

Target	Performance	Target achieved?
3	2	Off track

This performance commitment is reputational only so, there is no financial penalty or reward attached to its outcome. The cumulative performance will be reported in 2025 and will represent the five-year total.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	0.0	0.0	✓

Our performance

There are twelve main ways by which we can inadvertently spread invasive species such as Japanese knotweed, for example through moving soil between construction projects containing seeds of invasive plants, or through anglers on our reservoirs transferring invasive plants in their nets. During the past year, we have worked to put in place appropriate mitigation on three of these pathways, specifically making sure we do not spread invasive species through undertaking aquatic ecology surveys, terrestrial ecology surveys or through our movements of biosolids.

Our approach to undertaking and implementing these measures is in close collaboration with the Environment Agency and with key stakeholders such as the Great Britain Non-Native Species Secretariat. Only two of the three pathways have been fully completed in time to be approved for this reporting year. We expect the third to be completed and reported in our 2023 APR.

Education

Encouraging change and understanding the value of water

What is it?

For this commitment we report the number of face-to-face learning hours that Yorkshire Water provides to promote an understanding of the value of water. This can include regional and community targeted campaigns as well as practical learning delivered at our specialist centres.

We get feedback on our education sessions to make sure that if we need to, we can make improvements to the learning sessions we provide.

Why is it important?

By teaching our communities the value of water we can drive changes in behaviour and raise awareness of how small changes make big differences. We educate communities about water usage as well as the water and wastewater treatment processes.

How did we perform?

Target	Performance	Target achieved?
20,000	22,576	✓

This performance commitment is underperformance only, meaning we only receive a penalty for poor performance and no reward for outperformance

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	20,000	5,590	✗

Our performance

For the majority of 2021/2022 this measure has been affected by COVID-19 as education centres only reopened in January 2022. As restrictions were lifted schools were eager to recommence school trips. The range of programmes now available has brought greater resilience which bring long term benefits.

We have improved the quality and quantity of virtual delivery and incorporated virtual assemblies into our standard offering. This allowed us to reach over 8,000 young people and adults on one day to talk about the importance of water safety.

We are proud to provide this service to our region and receive great feedback:

"Children have a better understanding of water waste and how to minimise this e.g. turning the tap off when brushing their teeth."

"We had spent time learning about the water cycle, floods etc, so learning about the processes that water goes through before it reaches the houses was informative. What not to flush was also surprising for a lot of them!"

Creating value from waste

Reducing materials which are sent to landfill

What is it?

This performance commitment challenges us to reduce waste and recycle as much as we can and reduce our costs in doing so. We measure the extra environmental, social and financial benefits using the Six Capitals approach. You can read more about our Six Capitals approach here:

The waste materials include:

- Grit, screenings, fats, oils and greases that enter and collect in the sewer network or wastewater treatment works.
- Water and wastewater sludges produced through treatment processes. There are also sludge storage lagoons, a legacy of historic operational practices.
- Heat lost to the natural environment – from sewage and from water and wastewater treatment plants, including energy generation assets.
- Construction, repair and maintenance waste, for example, excavation materials and redundant kit from sites.
- Land, including areas of unused operational sites, for operational purposes (hectares). It also includes company catchment land where further value can be taken by increasing recreation and environmental improvements.

Why is it important?

It's important that we reduce our impact on the environment in any way that we can and save money on unnecessary activities.

How did we perform?

Target	Performance	Target achieved?
£5m	£40m	✓

This performance commitment is reputational only and so, there is no financial penalty or reward attached to its outcome.

Previous performance

Year	Target	Performance	Pass/fail?
2020/2021	£0m	£3m	✓

Our performance

This year the total value generated has risen to £40m, which includes the £3m reported previously and additional value from the following projects:

1. Finishing construction of an integrated constructed wetland at Clifton (South Yorkshire) treating wastewater through natural wetland filtration. This nature-based solution will help to reduce reliance on energy heavy treatment processes whilst increasing biodiversity. Value was created by building on underused land and through cost and carbon savings associated with passive wastewater treatment processes. This created £0.6m of value.
2. Over the last two years we have planted around 31,000 trees on underused land across our estate. Tree planting provides multiple environmental and social benefits, including reducing flood risk, storing carbon, and improving amenity in the local area. These activities created £1m of value.
3. Working with our sister company, Keyland Developments, to develop an area of underused land near Whitby and secure planning permission for up to 290 new homes. The development scheme places a strong emphasis on sustainable construction principles and contains provision for different forms of housing (including 30% properties classed as affordable), for which there is currently high demand within the local area. The value created through this development is £36.3m.

Water recycling

Increasing the volume of water we recycle

What is it?

This performance commitment measure the volume of water recycled in our clean and wastewater sites in megalitres per day (Ml/d).

It includes:

- The re-use of process water in our clean and wastewater treatment sites; and
- The use of final effluent from our wastewater treatment sites for commercial applications.

Why is it important?

If we are able to increase the volume of water which we recycle, we can decrease the volume of water we abstract from rivers, streams, canals or underground for use at our clean water treatment works.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
2.77	0	✗	£41k

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	0	0	✓

Our performance

Following the Final Determination, we reviewed our delivery plan in line with our service commitments and allowed costs. As a result of this, and aligned with the priorities of our customers, we made the difficult decision to put on hold three specific water recycling schemes that were identified to deliver our Water Recycling performance commitment.

This performance commitment was developed to engender a culture of water conservation and to reduce water wastage. We remain committed to these principles, but in line with our customers priorities, over the next year, we're focusing our resources on achieving this through leakage reduction. However, we'll make sure that where there are opportunities to reduce water wastage through our interventions on other service commitments, we'll pursue these.

Affordability of bills

Providing services at an affordable cost

What is it?

We report the percentage of customers who respond positively to the question “How much do you agree or disagree that the water and sewerage charges that you pay are affordable to you?”

The question is asked by the Consumer Council for Water (CCWater) in an annual survey known as ‘Water Matters’.

Why is it important?

It’s important to us that we do not have unreasonable charges for our services and we keep our bills affordable. It’s also important we give our customers an opportunity to tell us if they think they are not. It also gives us a chance to assess the support we have in place for our customers who are struggling.

How did we perform?

Target	Performance	Target achieved?
82%	79%	✗

This performance commitment is reputational only and so, there is no financial penalty or reward attached to its outcome.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	81%	82%	✓

Our performance

The 2021/2022 research undertaken by CCWater and published in their Water Matters report states that 79% of customers are positively satisfied that their water and sewerage charges are affordable to them. This is below the Performance Commitment Target of 82% and a 3% decrease compared to the previous reporting year.

Due to the current economic climate and the impact of the Pandemic increasing the amount of time customers spent at home, we have seen a jump in consumption which has had an impact on measured customers’ bills.

There is currently an industry project underway led by CCWater focussed on affordability. Yorkshire Water have been involved in this project throughout and will continue to support the project and focus on affordability for customers where possible.

Direct support given to customers

Providing access to our financial support schemes

What is it?

This measures the number of residential customers who receive financial support through one or more of our approved schemes. These schemes include:

- WaterSure
- WaterSupport
- DWP Resolve
- Resolve
- Community Trust
- Fresh Start; and
- Domestic meter option for those customers requiring financial support.

If a customer receives financial support under more than one of the valid schemes during the reporting period, they will be counted as a single customer receiving support.

Why is it important?

We need to make sure that people are aware of, and have access to, our financial support schemes when they need them.

How did we perform?

Target	Performance	Target achieved?
>69,000	80,778	✓

This performance commitment is reputational only and so, there is no financial penalty or reward attached.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	58,000	61,406	✓

Our performance

This year's performance has seen an increase of over 30% on the previous year with an additional 19,000 customers, above last year's total, being helped. This has taken the total to over 80,000.

Throughout the last 5 years there has been an increase in both the number of schemes available, and the number of customers benefitting from those schemes. Of all the schemes WaterSupport, a social tariff for customers with low incomes, has the largest number of customers, at circa 35,000, for 2021/2022, and accounts for around 44% of the total customers supported.

This performance has been achieved by increased promotional activity to raise awareness of the support available. This includes building on our community engagement function, proactively reaching under-represented customer groups that need financial support with their water bill.

We have also launched a relief package to support our customers as we all continue to feel the impact of the rise in cost of living. We have an additional £15m, made available by our shareholders, to support our customers using our financial support schemes through to 2025. The bill relief package will support over 100,000 customers who are struggling every year.

Improvements to our application process have been extremely effective and we plan to continue to improve this further. We continue to look at improved data sharing opportunities as we explore eligibility verification through Department of Work and Pensions data and, utilising enhanced credit reference data, to ensure we can identify customers quickly.



Cost of bad debt

Reducing the cost of bad debt to our customers

What is it?

Bad debt is when we are unable to recover residential customer bills. When we are unable to recover bad debt this becomes a cost to our other customers. In an effort to keep this low, this performance commitment measures the percentage of each customer bill which results from bad debt.

Why is it important?

It's important that we ensure that our bill-paying customers contribute as little as possible to unrecovered bills. We are committed to keeping bills as low as possible and ensuring that customers pay for the services available to them.

How did we perform?

Target	Performance	Target achieved?
<3.37%	3.28%	✓

This performance commitment is reputational only and so, there is no financial penalty or reward attached to its outcome.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	3.23%	3.0%	✓

Our performance

For this performance commitment a lower number is better. It represents the reduction in the percentage of bills that relate to bad debt.

The Ofwat price review process incorporates an allowance in prices for the cost of debt considered to be irrecoverable by the company.

To help minimise this cost for our customers, we operate a range of schemes designed to help those who struggle to pay their bill, while having strong processes in place for overall debt collection.

Priority services awareness

Understanding the benefits of our Priority Services Register

What is it?

This measures the percentage of household customers who state, when questioned, that they're aware of the additional services offered by Yorkshire Water via the Priority Services Register (PSR). The Customer Council for Water (CCWater) conduct a survey independently. This is called the 'Water Matters Survey'. You can read their latest report [here](#):

The PSR is a free service provided to customers in vulnerable circumstances. This can be a situation which is temporary or permanent and impedes a customers' ability to access or benefit from our services. Services within the PSR include;

- Braille bills and information;
- card warnings;
- CD bills;
- priority supply connection;
- help for customers who use home dialysis;
- large print bills or information;
- delivery of bottled water during an interruption to supply;
- nominated person to handle the account;
- password on accounts;
- text telephone contact;
- face-to-face visits.

Why is it important?

We want our customers to know that extra help is available when they need it. Our customers are at the heart of everything we do and it's important our customers know how to access support from us.

How did we perform?

Target	Performance	Target achieved?
>54%	47%	✗

This performance commitment is reputational only and so, there is no financial penalty or reward attached.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	50%	43%	✗

Our performance

Despite not reaching the required target for this measure, performance has improved this year to 47% due to the consistent external communications about our PSR. As well as a multi-channel marketing campaign to coincide with annual billing, we've created targeted social media adverts throughout the year to raise awareness. We've also been accompanying our notifications and regular communications to customers with messages about our PSR services.

Priority services satisfaction

Understanding and improving what our vulnerable customers need

What is it?

This measures the percentage of our customers on the Priority Services Register (PSR) who are satisfied with their experience.

A survey is conducted which asks these customers 'Based on your priority services needs how satisfied are you with Yorkshire Water's service? Please use a scale of 1 to 5 where 5 is equal to very satisfied, 4 to quite satisfied, 3 to neither satisfied nor dissatisfied, 2 to quite dissatisfied and 1 to very dissatisfied.'

The survey is conducted by an external company each month and we ask a minimum of 600 customers annually. We make sure that we ask a representative sample of customers who use a variety of the services offered.

Why is it important?

We need to make sure that the services we offer to customers made vulnerable by their circumstances are adequate and look to make improvements where they are needed.

How did we perform?

Target	Performance	Target achieved?
84%	80%	✗

This performance commitment is reputational only and so, there is no financial penalty or reward attached to its outcome.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	82%	91%	✓

Our performance

Our performance for the year 2021/2022 was 80% overall satisfaction with the PSR services.

The decrease in score was driven by an increase in the proportion of neutral scores (those answering 'neither satisfied nor dissatisfied'). Our reviews show this may be a result of customers not having cause to use the PSR service. For example, the majority of our PSR customers are those with a password to be used when visiting their property to confirm the caller is a genuine Yorkshire Water employee. In the absence of a visit from Yorkshire Water, this service has not been accessed. Similarly, in circumstances where a customer has joined the register to be prioritised for bottled water deliveries during a water supply interruption, where there has been no requirement for the service, the customer may not be able to comment on their satisfaction. It is important to note that dissatisfaction levels have not changed year on year, therefore we do not believe that the service offered has deteriorated.

Recognising that there's more work to do to support customer on our PSR, we have now introduced a vulnerability steering group that will enable teams from across the business to identify risks & opportunities and work collaboratively on new initiatives and improvements.

Inclusive customer service

Improving the quality of service to our vulnerable customers

What is it?

Our priority services are reviewed and assessed by an independent panel of third-party organisations and charities. They score three aspects of our priority services:

- the accessibility of our priority services
- the types of services provided; and
- the effectiveness of the services provided.

Each individual organisation gives a score based on a scale of one to five (one=low competence, little evidence of performance; five=highly competent, strong evidence of performance).

This performance commitment reports on the overall score. The overall score is the total of all the scores divided by the number of scores. We report a percentage improvement from our 2019/2020 score (baseline). Our baseline is 3.21.

We also track the average scores of each individual element so we can focus our improvements on the right areas.

This measure is conducted and overseen by an external provider who ensures the quality and accuracy of the responses received are transparent.

Why is it important?

It's important that the services we provide our vulnerable customers are accessible, wide-reaching and effective. This commitment makes sure we continue to improve and meet our customers needs.

How did we perform?

Target	Performance	Target achieved?
8%	20%	✓

This performance commitment is reputational only and so, there is no financial penalty or reward attached.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	4%	24%	✓

Our performance

We have met the required target for this measure and have made an improvement to the quality scoring of our services of 20% from our baseline year. We have seen a slight decrease of our overall score to 3.85 from 3.97 last year.

The slight lowering of the overall score is caused by decreases in scores of two questions which focus on our performance and our growth of the Priority Services Register (PSR). The organisations felt that bottled water response times were not effective and we could not evidence consistent delivery of the water. We are currently working to improve this. Several other pieces of work have led to increases in scores on other segments.

Improvements in our training of colleagues, having language translation services and some good partnership working have been specific areas where we have focussed resources and development which has delivered continued positive results.

We have set up a vulnerability hub with key colleagues to support business change focussed on vulnerable customers and to steer work to targeted areas.

Gap sites

Reducing the number of connected properties which are unknown to us

What is it?

A 'gap site' is an occupied property not known to us which is connected for water services and therefore not being billed. We aim to reduce our household the amount of time it takes to bill these properties from the time they are identified. This commitment reports the percentage of gap sites we identify which are added to the billing system within 12 months of identifying them.

Why is it important?

If a property is receiving a service and not being billed, it means our other customers are not receiving fair charges. It's important that we identify gap sites and bring them into billing as soon as we can so we can reduce bills for our customers who are already paying.

How did we perform?

Target	Performance	Target achieved?
83%	83%	✓

This performance commitment is underperformance only. As we have achieved the target for this measure, there is no penalty but also no reward.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	80%	19%	✗

Our performance

Following on from last year, we have redesigned and implemented new processes so gap sites that are relevant to the performance commitment are identified and prioritised. We have employed a team of colleagues to focus specifically on improving this measure. They have increased focus on identification of potential gap sites and improving billing information.

The failures that we have seen are due to issues with historical gap sites which, as shown by our improved performance, we have worked hard to resolve.

Of the 565 gap sites within this measure, 218 have subsequently been reported in the performance commitment 'managing void properties'.

We are confident that, going forward, the performance of this measure will continue to improve.

Managing void properties

Reducing the number of properties connected and occupied but not billed

What is it?

'Void properties' are household properties within our supply area which are connected for water or wastewater services but are unoccupied so do not receive a charge. This commitment aims to reduce the void properties by identifying where there are occupied properties or services used which can be billed. We report the percentage of our residential properties which are void properties and aim to be as low as possible.

Why is it important?

We aim to reduce these to ensure that the charges that our bill paying customers receive are fair and we can reduce these where possible.

How did we perform?

Target	Per- formance	Target achieved?	Reward
<4.33%	3.78%	✓	£1.99m

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	<4.5%	4.73%	✗

Our performance

We have notably improved the performance of this measure from last year and have successfully managed our recovery plan. We are focussing on the validation of void properties and ensuring that our billing is accurate.

As part of the on-going improvements, we have:

- diversified an increased volume of third-party data to identify occupiers of empty properties,
- introduced new internal processes and data sources to streamline void management services,
- made changes to existing and new mail content and data mailers to encourage increased returned and contact rates,
- increased unmeasured property inspections to determine occupancy, and
- improved digital channel services to encourage previous or future occupancy details when people vacate or move into a property.

Drinking water contacts

Improving the quality of our drinking water

What is it?

We report the number of times we are contacted by our customers due to the look, taste or odour of drinking water per 10,000 of the population we serve. The classification guidance for this performance commitment is defined by the Drinking Water Inspectorate here:

We aim to keep these contacts as low as possible.

Why is it important?

The quality of the water which we provide is of the utmost importance to us. It's important our customers can rely on a high standard of drinking water from us.

How did we perform?

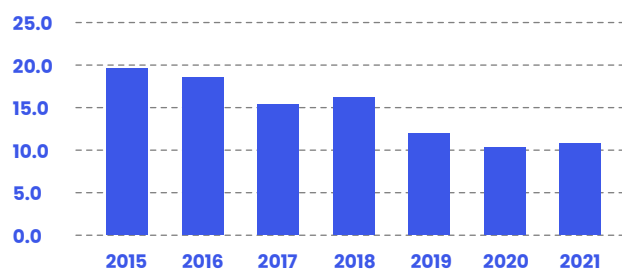
Target	Per- formance	Target achieved?	Penalty
10.6	10.9	✗	£369k

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	11.4	10.5	✓

Our performance

There has been a sustained long-term period of reduction in the number of water quality contacts from customers since 2015. However, unfortunately, there was an increase in contacts in the calendar year 2021 which is the reporting period for this measure. The final year output of 10.9 per 10,000 of the population was an increase on 10.5 reported in the previous year and means we did not reach the required performance level of 10.6.

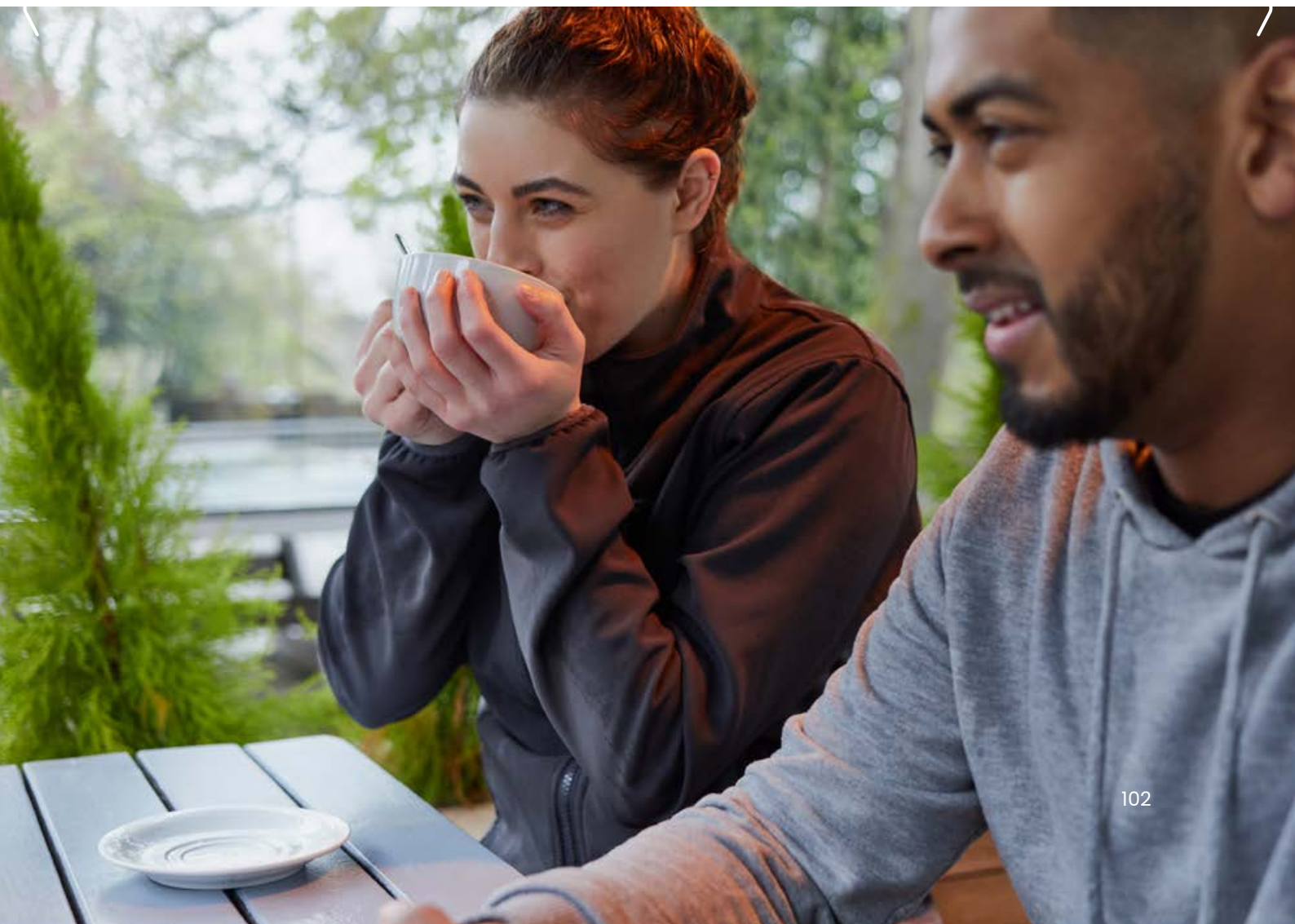


Water Quality Contacts per 10,000 population

Water quality contacts by definition can be broadly split into three sub areas; brown, black or orange discolouration, appearance, and taste & odour. The three groups contribute approximately a third each to the overall measure, and performance deteriorated in all three subgroups.

The number of contacts received is fundamentally impacted by weather conditions. In the early months of 2021, there was substantial variation in temperature, conditions which lead to increased perception of chlorine. In addition, although peak summer demand was marginally lower than previous periods, average demand was sustained at higher levels leading to relatively poor discolouration performance over the autumn. It is possible that changes in demand use as a result of adaptation to post pandemic working arrangements may have impacted performance.

Improvement in performance over the past 5 years has been driven by the Distribution Maintenance Teams proactive and reactive flushing activity and this activity is continuing. In 2022 we are implementing the output of an expert view of discolouration management by Sheffield University. However, increasingly, focus is also being given to conditioning of the upstream trunk mains to reduce the loading of downstream areas with mains sediment.



Significant water supply events

Improving the reliability of our supply

What is it?

This measures the number of supply interruptions to one or more properties which last for 12 hours or longer. They are counted irrespective of whether it's planned e.g. during works to improve our network, unplanned e.g. during an incident or caused by a third party e.g. damage to our network.

We aim to keep these events as low as possible.

Why is it important?

It's important that our customers have a reliable supply of water and, if there is an interruption to supply, we put in adequate measures to mitigate the effects of this, reducing the impact on customers.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
13	41	✗	£7.42m

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	14	19	✗

Our performance

Our performance of 41 events represents a significant deterioration on the previous year's performance of 19 and is significantly over the target of 13.

The increase in events is predominantly due to the impact of Storm Arwen, where a high number of simultaneous interruptions events were caused by loss of power to hundreds of our distribution water pumping stations. The majority of customer supplies were restored quickly due to the response of our emergency teams, however there were 20 events that we were unable to resolve within 12 hours due to challenges accessing sites due to severe weather, and the unavailability of emergency generators due to regional demand across a number of utilities. We have sought an intervention from Ofwat in relation to these events to omit them from this reporting period. You can read our representation to Ofwat in our 'In-Period ODI' report, [here](#)

In addition to the impact of Storm Arwen, this year we have experienced high levels of network failure requiring emergency response due to loss of, or imminent loss of supply. In 2021/2022 the overall volume of these emergencies was a 7.8% increase on the previous year and was the highest since we began tracking the measure.

An increase in network failure and the resulting increase in interruptions resulted in a significant management intervention in the summer resulting in stabilised performance, with performance tracking the Performance Commitment level since November, and into Q1 of 2022/2023.

Low pressure

Improving the water supply our customers receive

What is it?

This performance commitment reports the number of properties experiencing poor or no water supply due to low pressure.

The low pressure reference level applies to a single property and is measured on the customers, side of any meter or company fittings.

Why is it important?

It's important to us that our customers have a reliable supply of water and that our services are of the highest standard. Maintaining and improving pressure reduces the risk of supply issues.

How did we perform?

Target	Performance	Target achieved?
>13	4	✓

This performance commitment is underperformance only. As we have achieved the target for this measure, there is no penalty but also no reward.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	14	12	✓

Our performance

This year's performance of four properties is below the required target of 13 properties and a significant improvement on last year's performance of 12 properties.

We have expanded our analysis of low-pressure violations and focussed on providing acceptable levels of pressure to our customers.

Repairing or replacing customer owned pipes

Reducing leakage and water quality issues

What is it?

We report the number of residential supply pipe repairs and renewals carried out by Yorkshire Water each year free of charge.

When a supply pipe leak on a residential property is having a detrimental impact on our network, we can intervene using our statutory powers in Section 73-75 of the Water Industry Act 1991. We can then isolate the water supply and/or locate and repair the leak.

As part of this performance commitment we do not report:

- Business properties receiving a bill for water services,
- 'New Build' residential properties
- Internal leaks where the leak is located inside the property or within the cavity wall,
- Supply pipes under residential properties or structures,
- Where third party accidental, reckless or deliberate damage has occurred.

Why is it important?

Replacing pipes on residential property will improve the quality, pressure, and flow of water for our customers. It will prevent water being lost through leakage and our customers won't need to contact us about these issues.

How did we perform?

Target	Per- formance	Target achieved?	Reward
>7,109	7,335	✓	£101k

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	6,882	3,850	✗

Our performance

This year we have made a great improvement on previous years performance. Last year COVID-19 had a negative impact on this performance commitment as the national lockdown led to non-essential customer work being paused.

From April 2021, COVID-19 restrictions were gradually lifted until July when all legal restrictions were removed. We implemented a recovery plan for this measure and identified areas with high leakage and focussed on streets where we could deliver concentrated improvements to poor supply pipes.

There were 20 exceedances of the standards for aesthetic metals, contributing 0.96 units to the Compliance Risk Index (CRI) CRI score. This compares to 10 failures in 2020 (0.38 units) but is more similar to 27 failures in 2019 (1.10 units) and 18 failures in 2018 (0.88 units).

There was a notable reduction in taste and odour failures during 2021/2022. Four compared to 14 in 2020. This resulted in a much smaller contribution to CRI from these parameters.

External sewer flooding

Reducing the number of external sewer flooding events

What is it?

External sewer flooding is when there is flooding within the curtilage (grounds) of a residential, public community or business property. We report the number of these events which occur with a view to reduce these as much as possible.

Why is it important?

Experiencing or seeing external sewer flooding is an unpleasant experience for our customers and we understand that it's something that can impact their day to day lives. Reducing these incidents lowers the negative impact that this has on our customers and any disruption it may cause.

How did we perform?

Target	Per- formance	Target achieved?	Reward
<6,809	4,578	✓	£17.6m

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	7,188	5,038	✓

Our performance

We have again exceeded the target for this measure and improved on our previous year performance by reducing our external sewer flooding events by 460 events.

As our external sewer flooding team also manage our internal sewer flooding measure you can read about our performance on [page 67](#) under the measure internal sewer flooding.

Bathing water quality

Improving the water quality at our beaches

What is it?

This performance commitment measures the number of designated bathing waters which exceed the EU Bathing Water Directive requirements for 2020–2025. The 19 designated beaches in our region are;

1. Bridlington North Beach;
2. Bridlington South Beach;
3. Cayton Bay;
4. Danes Dyke;
5. Filey;
6. Flamborough South Landing;
7. Fraisthorpe;
8. Hornsea;
9. Reighton;
10. Robin Hoods Bay;
11. Runswick Bay;
12. Sandsend;
13. Scarborough North Bay;
14. Scarborough South Bay;
15. Skipsea;
16. Tunstall;
17. Whitby;
18. Wilthorpe; and
19. Withernsea.

Designated bathing waters in England are classified into 'Excellent', 'Good', 'Sufficient' and 'Poor' based on a sample carried out by the Environment Agency during bathing water season. Sample results from the previous four years are statistically analysed and a classification of the bathing water quality is usually announced in November each year.

Why is it important?

Improving the quality of our bathing waters enhances the coastal environment, supports the development of the leisure & tourism industries, and improves our customers' enjoyment of these areas.

How did we perform?

Target	Per- formance	Target achieved?	Penalty
18	16	✗	£2.47m

This performance commitment is underperformance only, meaning only receive a penalty for poor performance and no reward for outperformance

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	18	16	n/a

Our performance

The 2021 bathing season has seen 16 out of 19 of Yorkshire's coastal bathing waters exceed the minimum standard and achieve 'Good' or 'Excellent' ratings. Bridlington South remains 'Sufficient', while Scarborough South has improved from 'Poor' to 'Sufficient'.

Our beach at Tunstall remains as unassessed as there is no safe access to the beach due to coastal erosion and therefore it cannot be accessed for regulatory sampling or by the public for use. Whilst we have requested that this beach be discounted from our reporting, Ofwat has advised us to continue to include this as a registered bathing water. This is reported as one of our three failed bathing waters.

Strong partnership working and sharing data is essential to make the best use of resources. Multi-agency pre-season walkovers and assessments at the beaches have proven very beneficial. This is something that we will look to ensure are completed at every beach regardless of the water quality status from the previous season.

Surface water management

Lowering the amount of surface water that goes into the public sewers

What is it?

We report the number of hectares (Ha) of surface water run-off removed or attenuated. This performance commitment has three components to its measurement:

- Surface water removed through blue-green infrastructure solutions. This approach mimics the natural water cycle. Doing this regulates flow and treats storm water run-off naturally, resulting in a reduction in peak flows and cleaner water being discharged to water courses. Blue-green infrastructure solutions include what is known as Sustainable Drainage Systems (SuDS).
- Surface water removed through disconnection. This approach uses underground pipes to take surface water straight to receiving water courses.
- Surface water attenuated by blue-green infrastructure. This approach slows the flow of surface water into our network, managed in a more natural way to ensure continuity of our network.

Why is it important?

Reducing the amount of surface water which runs into the public sewer also reduces the risk of sewer flooding and pollution incidents. It also reduces potential long-term costs to enhance the sewerage network which may otherwise be required to relieve pressure on the network.

How did we perform?

Target	Per- formance	On track?	Penalty
4	2	✗	£10k

Previous performance

Year	Target	Performance
2020/2021	1	1

Our performance

This year represented the second reporting year for this metric. Though we are reporting 2 hectares of land against our performance

It was envisaged when this metric was first created that sign off for the schemes would generally go through the flood partnership steering group, as the majority of the anticipated expenditure was expected to go through this mechanism. This mirrors what is documented in our final determination for PR19. However, in the case of our Roundhay Scheme this was promoted to reduce storm overflow operation rather than flooding and hence has not gone to the flood steering group, despite it qualifying for all other aspects under these criteria. We have included the area of surface water managed for Roundhay in this year's return. For future versions of this procedure, we will change the approval to be the appropriate part of the organisation, rather than limiting this to the flood steering group. This is in light of anticipated additional work on storm overflows.

Quality agricultural products

Reducing environmental risk and creating agricultural products

What is it?

During wastewater treatment, liquids are separated from solids. Those solids are then treated physically and chemically to produce a semisolid, nutrient-rich product known as biosolids. We report the percentage of biosolids sent to land that meets the Biosolids Assurance Scheme (BAS). We include sludge imported by third parties within this measure.

This performance commitment incentivises us to treat our sewerage sludge to a high standard so it can be recycled and used as a quality agricultural product.

Why is it important?

By recycling our sludge it reduces the environmental risk posed through unsafe disposal of sewerage sludge. It reduces the need for farmer to apply commercial fertiliser and provides a more cost effective approach.

How did we perform?

Target	Performance	Target achieved?
100%	100%	✓

This performance commitment is underperformance only, meaning only receive a penalty for poor performance and no reward for outperformance

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	100%	100%	✓

Our performance

We are proud to have achieved the performance target; all of our biosolids that were recycled to agriculture are compliant with the high standards of the Biosolids Assurance Scheme (BAS).

During the reporting year, all biosolids recycled to agriculture by Yorkshire Water was from BAS certified processes. Where we have recycled through sludge through third parties, we have confirmed their BAS certification prior to delivery.

During the reporting period we passed a BAS surveillance audit due to the addition of our new Huddersfield Sewerage Treatment Facility (STF) providing assurance in our processes and procedures.

We have processes in place to monitor and identify any issues with biosolids compliance. Where there are potential breaches we quarantine or sample and hold material until we are sure the biosolids are suitable for agricultural use. If a material does not comply with our processes and procedures, we would not recycle this material to agriculture. An alternative and more costly recycling route would be found so we would continue to achieve our target of 100%.

We have used this route a number of times in 2021/2022: 244 wet tonnes from Dewsbury STF and 1721 wet tonnes from Aldwarke STF due to significant rainfall and/or flooding caused product quality issues. During summer 2021 we produced 1279 wet tonnes of product at Huddersfield that needed to be recycled prior to the setting of BAS control limits, due to the commissioning of our new digestion assets and the completion of validation processes.

Looking forward the BAS standard is to be updated to incorporate the “20 measures” required under the water industry’s agreement with DEFRA for best practices for avoiding diffuse pollution from agriculture (Farming Rules for Water). This will increase the standards we need to comply with going forwards, for example we will need to assure a minimum 20% dry solids concentration of our biosolids from 1st July 2022. As standards for BAS increase, we recognise we need to adapt and invest in our sludge treatment processes to remain compliant.



Renewable energy generation

Increasing the amount of renewable energy generated

What is it?

We generate energy through the biogas we produce when we treat sludge. Energy generation of biogas is reported in gigawatt-hours (GWh).

The following types of power generation on our operational sites are excluded from the performance commitment:

- solar;
- wind; and
- hydroelectric.

Why is it important?

By producing more renewable energy, we mitigate the effects of climate change and protect our customers from price volatility by making Yorkshire Water more self-sufficient.

How did we perform?

Target	Performance	Target achieved?
284 GWh	323 GWh	✓

This performance commitment is reputational only and so, there is no financial penalty or reward attached to its outcome.

Previous performance

Year	Target	Performance	Target achieved?
2020/2021	269 GWh	278 GWh	✓

Our performance

This year we utilised 323GWh of energy from our biogas, which is an increase on the previous year's outturn of 278GWh and a 14% outperformance of our in-year target. The significant increase over the previous year was due to our newly commissioned anaerobic digestion (AD) site at Huddersfield and the full year effect of our refurbished Dewsbury AD site. As a result of these capital schemes we processed more sludge in-house, creating even more biogas, and utilised this in the additional combined heat and power units (CHPs) and boilers at these locations. When the target for each year of AMP7 was originally set we anticipated these new assets being delivered roughly a year earlier than what actually materialised, hence the increasing year on year target.

Looking forward we are planning on investing in schemes for both additional CHPs and arrangements for Gas to Grid, where some of our biogas will be exported to third parties and used as fuel in applications such as powering vehicles, injecting into the natural gas network and the manufacture of hydrogen.

The target increases by 8% over AMP7 which lies within current performance levels. Any Gas to Grid scheme or additional CHP would likely provide benefits above this level, as will our targeted improvements in CHP maintenance, providing us with the opportunity to continue to reach this target throughout the AMP and provide further resilience to the volatile energy market.

Delivery of the Water Industry National Environment Programme (WINEP) requirements

Delivering environmental improvements

What is it?

Part of our investment between 2020 and 2025 will improve our impact on the environment. The Environment Agency tells us what we need to achieve through their Water Industry National Environment Programme (WINEP).

The performance commitment will measure against the latest WINEP tracker in the year in which performance is being reported. Therefore, performance for 2021/2022 will be reported based on the latest WINEP programme on 31st March 2022 and the schemes which have been delivered by this date. We report this performance as 'met' or 'not met'.

We'll secure confirmation from the Environment Agency that performance has been correctly reported.

Why is it important?

By completing the schemes set out in the WINEP we improve the natural environment for our customers. It will also help ensure that water can be abstracted from rivers and lakes without any negative effect on the environment.

How did we perform?

Target	Performance	Target achieved?
Met	Met	✓

This performance commitment is reputational only and so, there is no financial penalty or reward attached to its outcome.

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	Met	Met	✓

Our performance

There were 361 outputs required for delivery in Year 2, which addition to the 1 output delivered in Year 1 gives a cumulative total of 362 outputs.

The WINEP measure works alongside other performance commitments including land conserved and enhanced, length of river improved, studies within integrated catchment management and contribution to the reduction of carbon in our carbon related measures.

Living with water

Reducing the risk of internal flooding in Hull and Haltemprice

What is it?

We have committed to investing £23m into the Hull and Haltemprice partnership schemes to ensure customers receive an improved level of service.

The Hull and Haltemprice Resilience Investment is defined as the blue-green solutions developed and implemented as part of the 'Living With Water' partnership scheme in the region. Further details of the Living With Water Partnership are available here:

The reduction in internal flooding risk for properties in Hull is defined as the number of properties protected from internal flooding during rainfall events (including the impacts of climate change) of 1 in 5 years, 1 in 30 years and 1 in 75 year occurrences.

Delivery of the performance commitment and the reduction in properties at risk of internal flooding will be agreed with the relevant agencies and partners involved in the Living With Water partnership. Primarily, this will be:

- The Environment Agency
- Hull City Council
- East Riding of Yorkshire Council.

Why is it important?

We are providing customers with protection from investment and reducing the number of properties at risk of internal flooding. Wider benefits also include a reduction in embedded carbon e.g. avoiding solely using hard engineered solutions and concrete, removal of surface water and integrated partnership working.

How did we perform?

Target	Performance	On track?
£23m (to be achieved in 2025)	£1.612m	✓

This performance commitment is underperformance only, meaning only receive a penalty for poor performance and no reward for outperformance. This measures the investment over the 2020-2025 period and so the final outcome of this performance commitment will be reported in our 2025 APR.

Our performance

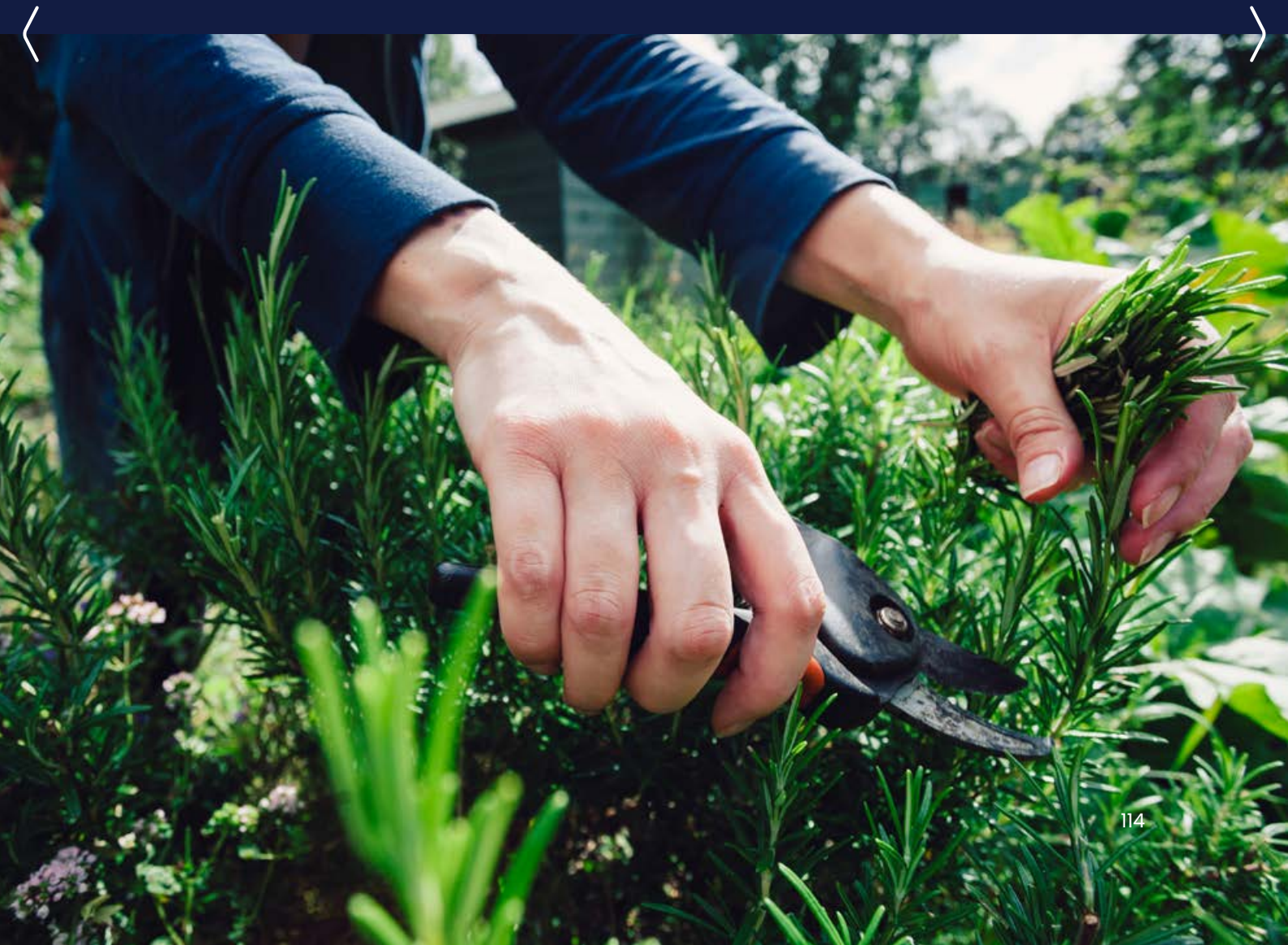
The expenditure in the first two years of this measure has focussed on the prioritisation and development of our partnership schemes that will deliver the benefits set out in the Performance Commitment. This has included defining and planning how interventions will be delivered in collaboration with Living with Water partners and our communities. This has been important as our interventions will be predominantly sustainable measures retrofitted into existing urban areas, improving amenity and biodiversity and enhancing the appearance of these areas.

The past two years have also focussed on adding detail into the hydraulic model which inform our solutions through targeted site surveys specifically at locations where interventions are planned. This early "spend-to-save" approach has had great benefit to understand buildability of interventions, key risks and improved confidence forecasting project costs and benefits.

The delivery of blue-green assets on this scale is new to all of the Living with Water partners and presents an exciting challenge not previously seen across the UK Water industry. To ensure we act in synergy with customers, Living with Water is embracing co-creation, linking into existing local community groups and events to spend time with local people understanding preferences for flood reduction measures. This could be constructed but also identifying issues which are at the heart of our communities (e.g. maintaining parking, incorporating or expanding local dog walking routes).

Greenhouse Gas Reporting 2021/2022

Climate change is a huge issue we're all facing together, which is why we've made reducing our greenhouse gas emissions a priority for us. In this section we report our greenhouse gas emissions for the past year across three categories: operational, capital, and land. We aim to achieve net zero operational emissions by 2030 and net zero for all greenhouse emissions no later than 2050.



Operational carbon

Reducing our greenhouse gas emissions

What is it?

This performance commitment measures the reduction in greenhouse gas emissions that are created as a result of our operations. This includes any greenhouse gas emissions created by our day-to-day operational activities like the electricity we use, fuel we put into our vehicles and emissions created when we treat our water and sewage.

Emissions are measured by taking raw consumption data and inputting it into the Carbon Accounting Workbook (CAW) which is developed by UK Water Industry Research (UKWIR). The CAW is the industry standard tool for reporting operational emissions.

This is measured as a percentage reduction from a baseline set in 2019/2020.

Why is it important?

We care about the environment, so reducing the greenhouse gas emissions from our operations mitigates our impact to climate change.

How did we perform?

Target	Per- formance	Target achieved?	Reward
4.8%	6.8%	✓	£472k

Previous performance

Year	Target	Per- formance	Target achieved?
2020/2021	2.4%	3.6%	✓

Our performance

The latest UK Water Industry Research (UKWIR), carbon accounting workbook (version 16) was used to restate our Baseline (2019/2020) and calculate our 2021/2022 emissions.

Overall, we have achieved a 6.8% reduction in operational carbon emissions from our restated baseline of 101,417 tonnes of carbon dioxide equivalent (tCO₂e). Outperforming our year 2 target (4.8% reduction) and delivering a performance payment of £472k.

Improvements in our methodology for measurement of sludge were incorporated which along with an uplift from the import and treatment of third-party, waste-water sludge (for the first time this year), led to an increase in reported process emissions. Business travel and associated emissions for our own employees and contract partners continued to be lower than pre-pandemic levels.

Market-based emissions have been reported reflecting our purchase of certified zero-carbon tariff electricity, and for the first time this year green gas.

Looking ahead we have plans to install significant solar-power generation capacity by 2025, to transition use of gas oil to natural gas, and drive energy and process efficiency. We have been working closely with UKWIR via the Net Zero Working Group to progress the science around the calculation and reporting of process emissions.

Operational Greenhouse emissions reporting for 2021/2022

The operational carbon performance commitment incentivises the company to reduce greenhouse gas emissions that contribute to climate change. Operational carbon performance relates to activities such as consumption of electricity, gas and transport fuels.

Emissions are measured by taking raw consumption data and inputting it into the Carbon Accounting Workbook (CAW) which is updated and published each year, by UKWIR. The CAW is the industry standard tool for reporting operational emissions and is reviewed each year. The annual review updates emission factors to reflect issues such as changes to national average grid emissions factors etc. It also makes updates in relation to new reporting requirements or improvements in science each year.

In early 2022 Ofwat released a consultation on changing the CAW methodology used, and we submitted a response on 9th March 2022. This resulted in CAW v16 being used for the remainder of the reporting period (year 2 onwards), while keeping the performance from year 1 fixed. The baseline year 2019/2020 was however recalculated using CAW v16.

Figure 1 shows our baseline and year two performance. Measurement of greenhouse gases arising from electricity consumption has been conducted using a market-based emissions factor. This means we use an emission factor based on the type of electricity we have purchased. As in previous year's we've purchased Renewable Electricity Generation of Origin (REGO) the gas equivalent (RGGO) certified zero carbon renewable energy so our emissions for electricity and gas are zero with the exception of a small quantity of consumption used to charge electric vehicles at third-party charging stations, where the source of supply was unknown.

Emissions are split into three types:

- **Scope 1 emissions** are those we directly release to the atmosphere, for example from burning fossil fuels on our sites, driving company vehicles, and releasing gases during treatment processes.
- **Scope 2 emissions** related to the consumption of electricity. In Yorkshire Water's case emissions are zero because we purchase certified zero carbon renewable electricity.
- **Scope 3 emissions** related to business travel on public transport and in private vehicles, activities from outsourced operators.

All emissions are expressed in terms of tonnes CO₂ equivalent (tCO₂e) which is a standardised measure to compare all greenhouse gases in a single number, rather than as separate gases.

The table below shows our emissions for our baseline (2019/2020) and our 2nd year (2021/2022).

Scope	tCO ₂ e		% Change against baseline
	Baseline: 2019/2020	Year 2: 2021/2022	
Scope 1	89,389	86,251	
Scope 2	0	1	
Scope 3	12,028	8,279	
Total emissions	101,417	94,531	-6.79%

Figure 1 – Operational carbon emissions

This shows a reduction of 6.79% in our second reporting year against our amended baseline. As mentioned above, our Scope 2 emissions are zero/close to zero because we purchase 100% certified zero carbon electricity and our scope 1 emissions as we have purchased gas from renewables as part of our activity to further reduce our carbon emissions.

The table below provides a summary of our strengths, weaknesses, opportunities, and threats (SWOT) analysis, in relation to our Operational emissions:

Strengths

- Senior management are driving action on decarbonising the business.
- Data systems allow us to monitor and forecast our progress against target on a monthly basis.
- We have a monthly carbon hub that meets to monitor performance and support the delivery of our carbon reduction plan to help us meet our targets.
- Independent verification of data inputs to ISO14064.
- Majority of data is measured, not modelled
- Carbon training courses provided to upskill colleagues.
- Carbon expertise across multiple business units.
- Most planned carbon reduction initiatives expected to result in financial savings on initial investment.

Weaknesses

- Monitoring, measuring, and reducing process emissions is complex and largely outside our direct control. There is industry wide uncertainty over the calculation and reporting of process emissions.
- Current emission reduction initiatives focused on incremental rather than transformational change.

Opportunities

- Growing support from customers and investors for investing in carbon reduction initiatives.
- Many carbon reduction initiatives have co-benefits for climate change resilience (both business and customers).
- There are wider sustainability opportunities associated with land management and carbon sequestration.

Threats

- Changes in external policy could have an adverse impact on our carbon emissions (e.g., more vehicle movements as a result of increased compliance requirements).
- Opportunities for decarbonisation limited by progress of wider business landscape and other regulatory pressures (e.g., WINEP).
- Uncertainty around the future cost of carbon e.g., this could come from competing demand for green energy and demand driven price increases.

Capital carbon and carbon arising from owned land

Reducing our greenhouse gas emissions

What is it?

This performance commitment measures our capital carbon emissions from the delivery of our capital investment programmes and any emissions arising from our owned land.

The measure will cover two areas of the company's carbon footprint:

- Capital emissions – the carbon that results from the company's investments to maintain and enhance its water and waste water assets. These activities include the construction, upgrading or refurbishment of assets needed to enhance or maintain service levels.
- Land emissions – the net balance of the carbon emissions that are absorbed and locked away in the company's land or released from its land. It doesn't include any human activities on the land we own, such as a farmers property and use of the fuels in the vehicles and equipment.

We will report the percentage change in the capital carbon emissions from the baseline.

This measure is subject to an external audit to make sure that all data related to the quantification, baselining, monitoring and reporting of capital carbon emissions is in compliance with PAS 2080:2016.

Why is it important?

Reducing the greenhouse gas emissions from our operations mitigates our impact to climate change.

How did we perform?

Performance	On track?
44.5%	✓

This performance commitment is reputational only and it is measured in year 5 (2025). There is no financial penalty or reward attached and our confirmed outcome will be reported in our 2025/2026 APR.

Previous performance

Year	Performance
2020/2021	71%

Our performance

Overall, we have achieved a 44.5% reduction in capital (embedded) and land carbon emissions from our year 2 baseline of 220,525 tonnes of carbon dioxide equivalent (tCO₂e). This represents a 98,077 tCO₂e reduction in carbon emissions, which is a brilliant result.

For capital carbon emissions, the approach to achieving embedded carbon reduction is to remove carbon at source, not at the point of delivery. The intention has been to prioritise the development of alternative low embedded carbon solutions to the areas of the programme where there is the greatest opportunity, such as Waste and Clean above ground programmes.

For land emissions we have used a model developed by a cross-sector research organisation (UK Water Industry Research) to estimate land carbon emissions based on an assessment of land cover combined with information on tree planting and peatland restoration activities carried out by Yorkshire Water since April 2020. The model shows 17,158 tCO₂e was emitted from land owned by Yorkshire Water in the 2021/2022 reporting year, which represents a reduction of 339 tCO₂e since the previous year.

Embedded Greenhouse emissions reporting for 2021/2022

The following document summarises Yorkshire Water's embedded greenhouse gas (GHG) emissions in relation to capital projects undertaken within the 2021/2022 reporting year.

Our reporting is based on the same data used for our Capital Carbon performance commitment, which represent 'cradle-to-gate' GHG emissions associated with the delivery of Yorkshire Water's capital investment programme for our 2020–2025 asset management plan. Unlike the performance commitment, however, the figures reported here do not incorporate GHG emissions/sequestration from our land holdings. Embedded GHG emission data are calculated from models based on material data combined with a third-party emission factor database. All data related to the quantification, baselining, monitoring, and reporting of embedded GHG emissions are in compliance with PAS 2080:2016.

Embedded GHG emissions for the 2021/2022 reporting year are presented in Table 1. We also provide embedded emissions for the previous year for comparison purposes.

Table 1: Embedded GHG emissions for the first two years of AMP7

Reporting year	Embedded emissions (tCO ₂ e)
2020/2021	90,455
2021/2022	105,290

Some large projects can take several years to reach completion. To facilitate reporting on an annual basis, we report emissions for all capital projects approved for delivery within the reporting year based on estimates of embedded emissions at the time of approval. Estimated emission data are refined as projects progress to completion, and therefore emission data for a given year may be subject to change in future years.

At this time, we report embedded GHG emission data for construction projects only. However, we are investigating the feasibility of reporting embedded emissions associated with maintenance activities in future, as well as additional emissions derived from onsite construction and offsite disposal of waste (i.e. cradle-to-build), and purchased goods and services.

A strengths, weaknesses, opportunities, and threats (SWOT) analysis of our current accounting and reporting processes, as well as carbon performance and impact, is presented in Table 2.

Table 2: SWOT analysis of Yorkshire Water's embedded GHG emissions

Strengths

- Reporting in compliance with PAS2080:2016.
- Emission calculations based on recognised third-party emission factor database.
- Use of in-house carbon models, which are refined and improved over time.
- Carbon training courses provided to upskill colleagues and contract partners.
- Partner and supply chain engagement on driving low-carbon solutions.
- Actively exploring new technologies (e.g., low carbon concrete) and solutions (e.g., treatment wetlands) to reduce embedded GHG emissions.
- Embedded GHG emissions incorporated into Yorkshire Water's decision-making framework.
- Contract partners financially incentivised to reduce embedded GHG emissions through project lifecycle.

Weaknesses

- Embedded GHG emissions currently calculated and reported for construction activities only (i.e. not maintenance activities).
- Current reporting is limited to cradle-to-gate rather than cradle-to-build, and therefore does not account for embedded GHG emissions associated with onsite construction or offsite waste management at present.
- No reporting of embedded GHG emissions for purchased goods and services accounted for at present, other than those related to construction.
- Emission factor database not updated with latest version at present.

Opportunities

- Growing momentum, experience, and data availability related to embedded GHG emissions.
- Contractors increasingly willing and able to provide required data to calculate embedded GHG emissions.
- Sharing of information and best practice between contract partners.
- Greater engagement with contract partners early in project lifecycle to maximise opportunities to reduce embedded GHG emissions.

Threats

- No standardised methodology for assessing embedded GHG emissions available at present.
- Regulatory reporting requirements for GHG emissions continue to evolve.
- Data availability and quality risks, especially for data sourced from smaller contractors and suppliers.
- Opportunities for decarbonisation limited by progress of wider business landscape and other regulatory pressures (e.g. WINEP).

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Regulatory information

The purpose of our regulatory financial information is for our stakeholders to understand how statutory financial accounting information, published under the Companies Act requirements, translates to the income, costs, assets, liabilities and cash flows of the appointed water and wastewater business of Yorkshire Water Services Limited, under regulatory accounting standards.

This section is structured as follows

This regulatory information section contains specific financial and non-financial performance information that is required under the Regulatory Accounting Guidelines (RAGs) issued by Ofwat.

This includes:

- Regulatory financial reporting which takes information from published statutory financial statements and adjusts that information to take account of differences between statutory financial reporting in accordance with UK Generally Accepted Accounting Principles (UK GAAP) and Regulatory Accounting standards (RAGs). On adoption of new UK GAAP (year ended 31 March 2016) there was a choice between Financial Reporting Standards, FRS101 and FRS102. We have elected to report our statutory financial information under FRS102.
- Price control and other segmental reporting financial information, which sets out financial information by price control and underlying operational processes.
- Performance summary for our performance commitments.
- Additional regulatory information as required by Ofwat.
- Cost assessment tables which provide information on the allocation of expenditure to different investment categories and information on the drivers of expenditure to support the development of cost models and comparative analysis. Where further explanation of specific information is required, technical notes are included as appropriate.

Where specific reference is made to tables and lines within the tables, they will be shown in the commentary as either Table 1A Line 1 or 1A.1, for example.

All tables have been published in an Excel spreadsheet alongside this APR document. The tables can be found at:

Summary of our overall financial performance

The below measures are a combination of key internal metrics reported to Board and metrics used by key investors to form a view on our financial performance.

Our key measures	2022	2021
Revenue Income receivable for services provided	£1,118.5m	£1,101.1m
Operating profit Gross profit less operating expenses and exceptional expenses	£242.3m	£241.4m
Adjusted EBITDA Earnings before interest, tax, depreciation, amortisation, and exceptional items – Reconciled to Operating Profit in <i>KPI section</i> above	£581.3m	£592.9m
Capital expenditure The amount spent to acquire, maintain, and enhance assets and infrastructure	£434.1m	£448.3m
Adjusted net debt¹ As defined by our financial covenants	£5,685.7m	£5,454.9m
Lowest of our class A ratings² The lowest of our ratings from the major credit reference agencies	Baa2	Baa2
Gearing³ The ratio of covenanted net debt to the published RCV	73.40%	77.66%
Regulatory Capital Value The regulated valuation of Yorkshire Water	£7,745.9m	£7,024.3m

¹ There has been a change in net debt metric compared with the prior period. Following a review of KPIs, the KPI gearing calculation disclosed above has been updated to use covenant net debt as the primary focus rather than regulatory net debt. Net debt defined by our covenants takes net debt per note 17 of the *Financial Statements* in the ARFS and adjusts for various accounting adjustments. Please see the *Key performance indicators* section in the ARFS for the full reconciliation. This is how our regulators assess our performance and hence is the metric most closely monitored by management. The regulatory net debt reported as a key metric previously was £4,366.3m as at the 31 March 2021.

² Ofwat previously monitored Yorkshire Water's Moody's Corporate Family Rating and S&P's Class A Issue Rating. As at 31 March 2021, the Moody's Corporate Family Rating (Baa2) was the lowest of those monitored. In May 2021, the Moody's Corporate Family Rating was withdrawn and subsequently, Ofwat advised that future monitoring would include the Moody's Class A Issue Rating alongside S&P's Class A Issue Rating. As at 31 March 2022, the Moody's Class A Issue Rating (Baa2) was the lowest of those monitored.

³ There has also been a change in the gearing calculation compared with the prior period. Following a review of KPIs, the KPI gearing calculation disclosed above has been updated to use the ratio of covenant net debt to RCV as the primary focus rather than regulatory net debt, see *Key performance indicators* section for more details. Regulatory gearing for the year ended 31 March 2021, as previously reported, was 77.17%. This is in line with Ofwat's KPIs for the water industry, definitions available at: ofwat.gov.uk/publication/key-performance-indicators-guidance/

⁴ Yorkshire Water have queried the inflation mechanism used by Ofwat for calculating RCV. It is, therefore, possible that the RCV reported above will change after the reporting date. The latest RCV can be found at ofwat.gov.uk/publication/regulatory-capital-values-2022

Below we review our financial performance:

- The movement in revenue is largely due to allowed inflationary price increases and changes in consumption. Whilst there were variations for household and business customers caused by ongoing home-working and restrictions due to COVID-19 impacting consumption, the net impact of these variations overall was small.
- Operating costs continue to be tightly managed. Operations have experienced various pressures on expenses in 2022, as a result of severe storms, unforeseen increases in electricity and chemical costs, and additional provisions for household bad debts due to the expected increased pressure on household income.
- Exceptional costs of £5.5m includes costs of £10.5m relating to a strategic review of our business processes to identify efficiencies and provide a step change in operational performance; offset by £3.0m insurance income relating to extreme weather events in prior years; and £2.0m income relating to deferred consideration receivable following the final true-up of the sale on the non-household retail customer business in the year ended 31 March 2020.
- Overall, the net impact of the above movements is a decrease to adjusted EBITDA of £11.6m and an increase to operating profit of £0.9m. A reconciliation between adjusted EBITDA and the statutory measure can be found in the Strategic Report of our ARFS.
- Net interest payable has increased to £594.9m (2021: £223.9m). This was predominantly a result of adverse fair value movements in the current financial year, coupled with an increase in RPI. The total fair value adjustments are a net £369.6m expense (2021: £102.0m expense). See *Managing financial risk* in the Strategic Report of our ARFS for more detail.
- We are therefore reporting a loss for the financial year for 2022 of £368.6m (2021: £11.1m profit). This represents an adjusted loss of £87.3m (2021: £116.7m profit). A reconciliation between this and the closest statutory profit measure can be found earlier in the Strategic report in the *Alternative Performance Measures* section of our ARFS.
- We have revalued infrastructure assets as at 31 March 2022 based on the value in use. The revaluation increased the asset value by £901.8m (2021: £217.0m uplift) which has been reflected in the revaluation reserve. Refer to note 12 to the *Financial Statements* in the ARFS for more detail.

Financial auditor's opinion

Deloitte.

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Independent Auditor's report to the Water Services Regulation Authority (the WSRA) and the Directors of Yorkshire Water Services Limited

Opinion

We have audited the sections of Yorkshire Water Services Limited's Annual Performance Report for the year ended 31 March 2022 ("the Regulatory Accounting Statements") which comprise:

- the regulatory financial reporting tables comprising the income statement (table 1A), the statement of comprehensive income (table 1B), the statement of financial position (table 1C), the statement of cash flows (table 1D), the net debt analysis (table 1E), lines 1F.1 to 1F.3, 1F.5 to 1F.8, 1F.12 to 1F.14, 1F.21 to 1F.22 and 1F.24 to 1F.26 of the statement of financial flows (table 1F) and the related notes; and
- the regulatory price review and other segmental reporting tables comprising the segmental income statement (table 2A), the totex analysis for wholesale water and wastewater (table 2B), the operating cost analysis for retail (table 2C), the historical cost analysis of fixed assets for wholesale and retail (table 2D), the analysis of grants and contributions and land sales for wholesale (table 2E), the household water revenues by customer type (table 2F, the revenue analysis & wholesale control reconciliation (table 2I), the infrastructure network reinforcement costs (table 2J), the infrastructure charges reconciliation (table 2K), the analysis of land sales (table 2L), the revenue reconciliation for wholesale (table 2M), residential retail social tariffs (table 2N) and historical cost analysis of intangible assets (table 2O) and the related notes.

We have not audited the non-household water revenues by customer type (table 2G), the non-household wastewater revenues by customer type (table 2H), lines 1F.4, 1F.9 to 1F.11, 1F.15 to 1F.20 and 1F.23 of the statement of financial flows (table 1F), the Outcome performance table (tables 3A to 3I) or the additional regulatory information in tables 4A to 4U, 5A to 5B, 6A to 6F, 7A to 7F, 8A to 8D, 9A, 10A to 10E and 11A.

In our opinion, Yorkshire Water Services Limited's Regulatory Accounting Statements have been prepared, in all material aspects, in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA (RAG 1.09, RAG 2.09, RAG 3.13, RAG 4.10 and RAG 5.07) and the accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.13, appendix 2), set out in section 4.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)"), including ISA (UK) 800, and applicable law, except as stated in the section on Auditors' responsibilities for the audit of the Regulatory Accounting Statements below, and having regard to the guidance contained in ICAEW Technical Release Tech 02/16 AAF 'Reporting to Regulators on Regulatory Accounts' issued by the Institute of Chartered Accountants in England & Wales.

Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the Regulatory Accounting Statements within the Annual Performance Report section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit, including the Financial Reporting Council's (FRC's) Ethical Standard as applied to public interest entities, and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.



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Emphasis of matter – special purpose basis of preparation

We draw attention to the fact that the Regulatory Accounting Statements have been prepared in accordance with a special purpose framework, Condition F, the Regulatory Accounting Guidelines, the accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.13, appendix 2) set out in the statement of accounting policies and under the historical cost convention. The nature, form and content of the Regulatory Accounting Statements are determined by the WSRA. As a result, the Regulatory Accounting Statements may not be suitable for another purpose. It is not appropriate for us to assess whether the nature of the information being reported upon is suitable or appropriate for the WSRA's purposes. Accordingly we make no such assessment. In addition, we are not required to assess whether the methods of cost allocation set out in the accounting methodology statement are appropriate to the circumstances of the Company or whether they meet the requirements of the WSRA.

The Regulatory Accounting Statements are separate from the statutory financial statements of the Company and have not been prepared under the basis of international accounting standards in conformity with the requirements of the Companies Act 2006 ("UK IASs"). Financial information other than that prepared on the basis of UK IASs does not necessarily represent a true and fair view of the financial performance or financial position of a Company as shown in statutory financial statements prepared in accordance with the Companies Act 2006.

The Regulatory Accounting Statements in section 4 have been drawn up in accordance with Regulatory Accounting Guidelines with a number of departures from IASs. A summary of the effect of these departures in the Company's statutory financial statements is included in the tables within section 1.

Our opinion is not modified in respect of this matter.

Conclusions relating to going concern

In auditing the Regulatory Accounting Statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the Regulatory Accounting Statements is appropriate.

Our evaluation of the directors' assessment of the company's ability to continue to adopt the going concern basis of accounting included:

- Understanding financial facilities including compliance with interest cover ratio covenants and obtaining confirmation of undrawn facilities;
- Understanding how the going concern model mirrors the business model and the forecasts used for impairment testing;
- Testing the accuracy of the model and assessing the historical accuracy of forecasts prepared by management; challenging the key assumptions used in the forecasts, such as revenue levels and capital expenditure, including giving consideration to the current and forecast economic environment with high inflation and low levels of unemployment in the UK;
- Assessing the maturity profile of the company's debt and the available liquidity for the going concern period;
- Performing sensitivity analysis based on contradictory evidence, including consideration of the market, latest third party economic forecasts and FY23 results to date; and
- Assessing the appropriateness of the going concern disclosures made in the financial statements.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the company's ability to



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continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises all of the information in the Annual Performance Report other than the Regulatory Accounting Statements and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the Regulatory Accounting Statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Regulatory Accounting Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Regulatory Accounting Statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the Regulatory Accounting Statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of the other information, we are required to report that fact.

We have nothing to report based on these responsibilities.

Responsibilities of the Directors for the Annual Performance Report

As explained more fully in the Statement of Directors' Responsibilities set out in section 4, the directors are responsible for the preparation of the Annual Performance Report in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA and the Company's accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.13, appendix 2).

The directors are also responsible for such internal control as they determine is necessary to enable the preparation of the Annual Performance Report that is free from material misstatement, whether due to fraud or error.

In preparing the Annual Performance Report, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the Audit of the Regulatory Accounting Statements within the Annual Performance Report

Our objectives are to obtain reasonable assurance about whether the Regulatory Accounting Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the Regulatory Accounting Statements.



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Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

We considered the nature of the company's industry and its control environment, and reviewed the company's documentation of their policies and procedures relating to fraud and compliance with laws and regulations. We also enquired of management about their own identification and assessment of the risks of irregularities.

We obtained an understanding of the legal and regulatory frameworks that the company operates in, and identified the key laws and regulations that:

- Had a direct effect on the determination of material amounts and disclosures in the Regulatory Accounting Statements. These included Regulatory Accounting Guidelines as issued by the WRSAs, UK Companies Act, pensions legislation and tax legislation; and
- do not have a direct effect on the Regulatory Accounting Statements but compliance with which may be fundamental to the company's ability to operate or to avoid a material penalty. These included the company's operating licence, regulatory solvency requirements and environmental regulations.

In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override. In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments; assessed whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluated the business rationale of any significant transactions that are unusual or outside the normal course of business.

In addition to the above, our procedures to respond to the risks identified included the following:

- reviewing financial statement disclosures by testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- enquiring of management, internal audit and external legal counsel concerning actual and potential litigation and claims, and instances of non-compliance with laws and regulations; and
- reading minutes of meetings of those charged with governance, reviewing internal audit reports, and reviewing correspondence with HMRC and WRSAs.

A further description of our responsibilities for the audit of the Regulatory Accounting Statements is located on the Financial Reporting Council's website at www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of this report

This report is made, on terms that have been agreed, solely to the Company and the WRSAs in order to meet the requirements of Condition F of the Instrument of Appointment granted by the Secretary of State for the Environment to the Company as a water and sewage undertaker under the Water Industry Act 1991 ("Condition F"). Our audit work has been undertaken so that we might state to the Company and the



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WSRA those matters that we have agreed to state to them in our report, in order (a) to assist the Company to meet its obligation under Condition F to procure such a report and (b) to facilitate the carrying out by the WSRA of its regulatory functions, and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the WSRA, for our audit work, for this report or for the opinions we have formed.

Our opinion on the Regulatory Accounting Statements is separate from our opinion on the statutory financial statements of the Company for the year ended 31 March 2022 on which we reported on 15 July 2022, which are prepared for a different purpose. Our audit report in relation to the statutory financial statements of the Company (our "Statutory audit") was made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our Statutory audit work was undertaken so that we might state to the Company's members those matters we are required to state to them in a statutory audit report and for no other purpose. In these circumstances, to the fullest extent permitted by law, we do not accept or assume responsibility for any other purpose or to any other person to whom our Statutory audit report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

A handwritten signature in black ink that reads "Deloitte LLP".

Deloitte LLP
Leeds, United Kingdom
15 July 2022

Statement as to disclosure of information to auditors

Each director in office at the date of this report confirms that:

- So far as the director is aware, there is no relevant audit information of which the company's auditor is unaware; and
- Each director has taken all the steps they ought to have taken as a director in order to make themselves aware of any relevant audit information, and to establish that the company's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Table 1:

Regulatory financial reporting

Introduction

The information in this section details 'Regulatory financial reporting' as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables.

[**Pro forma 1A**](#) Income statement

[**Pro forma 1B**](#) Statement of comprehensive income

[**Pro forma 1C**](#) Statement of financial position

[**Pro forma 1D**](#) Statement of cash flows

[**Pro forma 1E**](#) Net debt analysis (appointed activities) at 31 March 2022

[**Pro forma 1F**](#) Financial flows for the 12 months ended 31 March 2022 and for the price review to date

Table 1A
Income statement for the 12 months ended 31 March 2022

Line description	Units	DPs	Statutory	Adjustments			Total appointed activities	RAG 4 reference
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments		
Revenue	£m	3	1,116.590	15.941	15.368	0.572	1,117.163	1A.1
Operating costs	£m	3	-878.165	-20.361	-14.193	-6.168	-884.333	1A.2
Other operating income	£m	3	12.305	0.000	0.000	0.000	12.305	1A.3
Operating profit	£m	3	250.730	-4.420	1.175	-5.595	245.135	1A.4
Other income	£m	3	3.905	12.112	0.138	11.973	15.878	1A.5
Interest income	£m	3	41.935	0.000	0.000	0.000	41.935	1A.6
Interest expense	£m	3	-267.181	-14.707	0.000	-14.707	-281.888	1A.7
Other interest expense	£m	3	0.000	0.000	0.000	0.000	0.000	1A.8
Profit before tax and fair value movements	£m	3	29.389	-7.015	1.314	-8.329	21.060	1A.9
Fair value gains/(losses) on financial instruments	£m	3	-369.630	0.000	0.000	0.000	-369.630	1A.10
Profit before tax	£m	3	-340.241	-7.015	1.314	-8.329	-348.570	1A.11
UK Corporation tax	£m	3	-6.581	0.000	-0.254	0.254	-6.327	1A.12
Deferred tax	£m	3	-9.386	9.637	0.000	9.637	0.251	1A.13
Profit for the year	£m	3	-356.208	2.622	1.060	1.562	-354.646	1A.14
Dividends	£m	3	52.559	0.000	0.000	0.000	52.559	1A.15
Tax analysis								
Current year	£m	3	6.516	0.000	0.254	-0.254	6.262	1A.16
Adjustment in respect of prior years	£m	3	0.065	0.000	0.000	0.000	0.065	1A.17
UK Corporation tax	£m	3	6.581	0.000	0.254	-0.254	6.327	1A.18
Analysis of non-appointed revenue								
Imported sludge	£m	3			0.037			1A.19
Tankered waste	£m	3			5.572			1A.20
Other non-appointed revenue	£m	3			9.760			1A.21
Revenue	£m	3			15.368			1A.22

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Income statement

Table 1A takes information from the statutory accounts and captures the adjustments needed to show the regulatory income statement for the appointed business. Adjustments include both differences between UK GAAP and the RAGs, and the removal of non-appointed income and costs.

The appointed business is defined as the regulated activities of the appointee, that is those activities necessary to fulfil the functions and duties of a water and sewerage undertaker. The non-appointed business encompasses those activities where we are not a monopoly supplier, or the activity involves the optional use of an asset owned by the appointed business (examples include shared services to the Group and the treatment of tankered waste).

Financial Performance

The increase in appointed revenue to £1,117.2m (2020/2021: £1,096.9m) is due to allowed inflationary price increases. Whilst there were significant variations for household and business customers, caused by COVID-19 lockdowns impacting consumption, the overall net impact of these variations was small.

Non-appointed revenue of £15.4m (2020/2021: £15.3m) comprises £5.6m from imported tankered waste, £5.1m from Safemove (provides drainage and water searches for property buyers), £2.6m from Kelda Non-Regulated companies, £1.1m from our largest trade customer (Syngenta), £0.9m related to meter reading, and £0.1m of other movements.

Operating costs, totalling £884.3m (2020/2021: £866.6m), continue to be tightly managed. Operations have experienced various pressures on expenses in 2022 as a result of severe storms, unforeseen increases in electricity and chemical costs, and additional provisions for household bad debts due to the expected increased pressure on household income. As per 2020/2021, an adjustment has been made to remove pension deficit recovery payments of £12.4m (2020/2021: £12.5m) from operating costs, which are included within cash expenditure rather than operating expenditure in **Table 2B**, so that operating costs reconcile between the two tables. This adjustment increases profit for the year by £12.4m. This has been done to ensure comparability with the treatment of financial tables Ofwat required as part of the most recent price review, and is in line with the accounting standards applied by most of the water and sewerage companies. This is because Yorkshire Water's defined benefit scheme is

accounted for under the FRS102 accounting standard which applies the same rules as a defined contribution scheme, and the historical pension scheme deficit cannot be allocated between the different group entities. This results in all cash contributions being recognised as operating expenditure, including pension deficit contributions. The treatment contrasts to most other Water and Sewerage Companies (WASCs) who have adopted IFRS and are required to follow defined benefit pension scheme accounting, thereby excluding cash contributions in excess of the IAS 18 defined benefit pension cost from their operating expenditure.

An adjustment of £0.2m (2020/2021: £0.8m) has been made to move income, relating to third parties in relation to operating costs, from revenue to operating costs in order to offset the costs to which it relates. This adjustment has no impact on profit for the year.

A new adjustment has been made in relation to accounting for contributions to Ofwat's innovation fund. The adjustment removes operating costs of £3.5m relating to provisions made to pay future innovation competition winners from revenue collected from customers for the innovation fund as requested in Ofwat's information notice 2201 1.7. A further adjustment has been made to reverse the operating cost impact of the £0.2m cash paid to the innovation competition winners in 2021/2022. We have discussed this treatment with the other WASCs and concluded that the other side of the reversal of this amount be presented as an adjustment to other income on line 1A.5 in order to maintain the correct cash figure on **Table 1C** and to minimise the impact on other tables. The adjustment also increases Profit & Loss (P&L) reserves by £3.7m, reversing similar amounts posted to 2020/2021 operating costs for revenue collected in the prior year. The reversal of the £4.0m provision and £3.2m accruals relating to these amounts can be seen in **Table 1C** (lines 1C.19 and 1C.13 respectively).

Included within operating costs are net exceptional costs of £10.5m (2020/2021: £34.1m). In 2021/2022 these costs relate to a strategic review of our business processes to identify efficiencies and provide a step change in operational performance.

Other operating income of £12.3m (2020/2021: £9.2m) includes £3.0m (2020/2021: £5.7m) of exceptional insurance income received in relation to extreme weather events and £2.0m income relating to deferred consideration on the sale of the non-household retail customer business in the year ended 31 March 2020.

Interest income has decreased to £41.9m (2020/2021: £44.9m). Interest expense has increased to £281.9m (2020/2021: £181.2m), predominantly due to borrowings linked to the Retail Price Index (RPI) which has increased during the year.

Interest expense of £281.9m comprises:

- Interest payable on intra-group borrowings of £263.9m. This is interest on back-to-back loans with external borrowings raised by subsidiary financing companies;
- Interest charged on external borrowings, excluding those relating to direct procurement for customer arrangements of £29.2m;
- £3.4m relates to amortisation of debt issuance costs; offset by
- Net Interest receivable in relation to other leases under IFRS 16 of £0.7m due to early lease termination adjustments;
- Other financing costs/interest costs of £13.9m, predominantly relate to net interest receivable from swaps on hedge relationships. Yorkshire Water holds £1,289.0m notional value of inflation linked swaps on which the company receives interest based on the Sterling Overnight Index Average (SONIA) and pays interest based on inflation (RPI).

In respect of the £1,289.0m notional value inflation linked swaps, market expectations at 31 March 2022 of higher RPI rates and comparatively lower SONIA rates results in future expectations of the net amount payable/receivable on the company's inflation linked swaps (i.e. the SONIA linked interest receivable versus the inflation linked interest payable) being higher than that assumed last year. This in turn is largely responsible for the £369.6m fair value movement reflected as a cost (2020/2021: £102.0m cost) on the financial instruments. The net fair value cost of £369.6m also includes £96.4m (2020/2021: £48.3m) in relation to the RPI uplift on inflation linked swaps and £2.5m (2020/2021: £2.3m) relating to a reclassification of interest from interest to fair value.

The company's dividend policy is to:

- Determine a base dividend from a set yield applied to regulatory equity derived by reference to the company's actual capital structure. This base dividend is assumed to grow annually in real terms and with CPIH during AMP7, which recognises the management of economic risks and capital employed;

- Adjust the base dividend to reflect and recognise in-the-round company performance and benefit sharing from service and efficiency performance particularly performance against relevant targets set in the determination of price limits; the continuing need for investment of profits in the business and the funding of employee interests;
- Consistently calculate dividends in accordance with the policy for any dividend payments made in AMP7 and to ensure they are justified in relation to the factors outlined above; and
- Ensure there are sufficient profits available for distribution in the foreseeable future and the company remains financially resilient, following the payment of a dividend, when considering the undertakings and financial covenants that are part of Yorkshire Water's financing arrangements.

When approving dividends to be paid in a financial year, the Board assesses both company performance to date and that expected for the whole of an AMP to determine the total dividends that could be paid for the whole AMP. As such dividend payments are considered within the longer-term context of the business and not just on the basis on the last 12 months and explicitly considers the ability of the business to be able to deliver into the future given the proposed dividend.

For the 2021/2022 financial year the Board considered a number of factors prior to approval of dividends including: delivery of Performance Commitments that incorporate incentive based rewards and penalties for AMP7; circumstances where performance has not met targets; the on going Environment Agency and Ofwat investigations into environmental performance where the company remains actively engaged with these regulators to resolve questions around past performance and made investments to tackle recent issues; and the ability to maintain financial resilience through the remainder of AMP7 in line with the review of long-term viability.

Dividends of £52.6m were paid in the year (2020/2021: £45.2m): none of which were available to the shareholders of Kelda Holdings Limited (2020/2021: nil), Yorkshire Water's ultimate parent company, as they have continued to support the company's financial resilience since AMP6.

These dividends included distributions of £29.4m (2020/2021: £35.1m) that did not impact the company's liquidity position or its distributable reserves as they were returned immediately to the company in the form of interest receipts on intercompany loans. No dividends have been proposed post year-end in relation to 2022 (2020/2021: £nil).

Technical notes

The table below shows the detailed GAAP adjustments that are made to the income statement as detailed in the statutory accounts to derive the income statement for the appointed business. The net adjustment of £2.6m has decreased from the previous year (£9.3m in 2020/2021). This is predominantly due to the tax rate change for corporation tax increasing from 19% to 25%.

The underlying deferred tax movement for 2022 is £1.9m which is in line with previous years. However, the rate change adjustment is £9.3m which has increased this year's total figure to £11.2m (£2.0m in 2020/2021). Also impacting the net adjustment figure is the innovation fund adjustment, which has a net impact to profit for the year of £1.7m, largely relating to the deferred tax impact of this adjustment (2020/2021: £nil).

Line description	Grant & Contribution (G&C) Income	IFRIC 18	Capitalisation of interest and related depreciation	IFRS 15 Revenue Recognition	Innovation Fund	IFRS 16 Leases	Total
Line 1A.1 Revenue	(9.873)	(2.473)		28.287			15.941
Line 1A.2 Operating costs			4.779	(28.287)	3.700	(0.553)	(20.361)
Line 1A.5 Other income	9.873	2.473			(0.235)		12.112
Line 1A.7 Interest expense			(14.489)			(0.218)	(14.707)
Line 1A.13 Deferred tax			11.165		(1.791)	0.263	9.637
Total	-	-	1.456	-	1.674	(0.508)	2.622

The most significant differences between statutory financial reporting in accordance with FRS 102 and regulatory financial reporting are:

- Grants and contribution income totalling £9.9m recognised in revenue for statutory reporting is reclassified to other income for regulatory financial reporting. As such, this is a presentational adjustment only;
- Adopted sewers income of £2.5m recognised in revenue for statutory reporting is reclassified to other income for regulatory financial reporting. Again, this is a presentational adjustment only;
- Interest that is capitalised, and the related depreciation, in the statutory accounts is removed for regulatory financial reporting. The adjustments increase the regulatory interest expense by £14.5m, reduce related asset depreciation by £4.8m and reduce the associated deferred tax debit by £1.8m. There is also a further rate change adjustment for £9.3m which is to reflect the corporation tax rates increasing to 25% from 19%. The net effect of this adjustment is a £1.5m decrease to the regulatory loss for the year;
- £28.3m of billed and unbilled amounts receivable have not been recognised as revenue in the statutory accounts in the current year, on the basis that they are not probable of collection in accordance with the statutory accounts accounting policy. This reduction in revenue is offset by a consequential reduction in the bad debt charge and bad debt provision of the same amount. In line with the RAGs, this adjustment has been reversed in the income statement for the appointed business;
- £3.7m of operating costs relating to provisions made to pay future Ofwat innovation competition winners from revenue collected from customers have been removed as requested in the information notice 2201 1.7. The reversal of the £4.0m provision and £3.2m accruals relating to these amounts the can be seen in [Table 1C](#) (lines 1C.19 and 1C.13 respectively). The £3.7m adjustment includes an amount made to reverse the operating cost impact of the £0.2m cash paid to competition winners in 2021/2022. We have discussed this treatment with the other WASCs and concluded that the other side of the reversal of this amount be presented as an adjustment to other income on line 1A.5 in order to maintain the correct cash figure on [Table 1C](#), and to minimise the impact on other tables. These adjustments have a deferred tax impact

of £1.8m and therefore result in a net £1.7m decrease to the regulatory loss for the year; and RAG 1.09 (section 4.7.2) requires all companies to account for leases in accordance with IFRS 16 in the regulatory accounting statements. Since Yorkshire Water reports under FRS 102, a RAG adjustment has been included for the year ended 31 March 2022 to ensure IFRS 16 is applied. This has resulted in Yorkshire Water recognising right of use assets within fixed assets and lease liabilities within fixed rate borrowings for regulatory financial reporting. As a result:

- Right of use assets have been included within table 1C with a net book value of £11.4m;
- Lease liabilities of £12.2m are included, of which £2.4m is due in less than 1 year and £9.8m is due in more than 1 year;
- Operating expenditure has decreased by £0.6m due to the removal of the lease expense offset by additional depreciation charged on the right of use assets; and
- Additional interest costs associated with the lease liabilities of £0.2m have been incurred for regulatory financial reporting.

Together the above adjustments for IFRS 16 result in a net decrease in the loss before tax of £2.6m.

Statement on differences between statutory and Regulatory Accounting Guidelines (RAG) definitions

Differences between statutory and regulatory definitions for Tables 1A, 1B, 1C and 1D has been provided under Table 1. We have also provided a narrative explanation on the significant differences and what they relate to. We have provided a reconciliation of borrowings between Table 1E and Table 1C and an explanation of the reasons for the differences.



Tax strategy for the appointed business

Yorkshire Water is committed to acting with integrity and transparency in all tax matters.

A copy of the tax strategy adopted by the Yorkshire Water Board is publicly available at: [www.yorkshirewater.co.uk/taxstrategy](#) and is included below.

Yorkshire Water Services Limited Tax Strategy and Policies

Adopted by the Board of Yorkshire Water Services Limited on 24 November 2021.

This strategy applies to the group of companies headed by Yorkshire Water Services Limited ("the YW Group") in accordance with Schedule 19 to the Finance Act 2016. It is effective for the year ending 31 March 2022.

The approach to management of our tax affairs is driven by our overall strategic direction, the most relevant aspects relating to the following two of our five "Big Goals":

- **Being a Great Partner** – in particular the aspects of this goal to, "lead by example" and, "be open about what we do"; and
- **Keeping Services Affordable** – "We want our services and bills to be affordable for everyone." Managing the Group's tax liabilities by recognising appropriate legislative concessions and reliefs is of benefit to customers.

We also use the concept of the Six Capitals and our tax strategy and associated decision-making is influenced by the following Capitals:

- **Social Capital** – our relationships and customers' trust in us; and
- **Financial Capital** – our financial health and efficiency.

Bearing these Goals and Capitals in mind mean that the Group has a tax strategy and policies that address the need to be transparent regarding our approach to tax matters, to build and maintain trust with stakeholders while also recognising appropriate legislative concessions and reliefs for the benefit of customers.

Goal – Being a Great Partner Capital – Social Capital

We are committed to acting with integrity and to adopt the highest standards of openness and transparency with regards to our approach to our tax affairs. Our tax strategy and policies require that we fully comply with both the letter of UK tax law and its application as it was intended. We make timely and accurate tax returns that reflect our fiscal obligations to Government.

We aim for certainty on the tax positions that we adopt, however, tax law can be unclear at times or subject to interpretation. With this in mind, our policy is:

- not to enter into transactions that have a main purpose of gaining a tax advantage; and
- not to make interpretations of tax law considered to be opposed to the original published intention of the specific law.

To support us in ensuring that we have interpreted tax law and its intended application correctly, we seek advice from large accounting firms, legal firms and/or tax counsel as appropriate.

For example, we do not use artificial tax avoidance schemes or use tax havens to reduce our tax liabilities.

Relationship with HM Revenue & Customs

An important part of our tax strategy and policies, and to support our Goal of Transparency, is the maintenance of a strong, proactive working relationship with HM Revenue & Customs ("HMRC"). We are transparent with HMRC and, in cases of interpretation or complexity, work with them on a real time basis to determine the amount of tax due.

Tax disclosure

We understand the value of our financial reporting to customers, investors and other stakeholders. We work to provide enhanced, transparent and balanced disclosure in communicating our tax affairs.

Goal – Keeping Services Affordable Capital – Financial Capital

Managing our tax liabilities by recognising appropriate legislative concessions and reliefs is of benefit to customers (through fair and affordable bills) and investors (through fair and sustainable returns).

Our tax strategy and policies seek to make use of such appropriate reliefs and to control our tax costs so that money is not wasted. Decisions regarding such reliefs are taken using a decision-making framework that addresses the control of tax costs being trusted with stakeholders.

Whilst seeking to manage tax liabilities, our policy is not to take an aggressive interpretation of tax legislation or use artificial tax avoidance schemes.

Tax Governance

Tax is part of the Finance function and is the ultimate responsibility of the Chief Finance Officer who is responsible for the tax strategy and policies.

Tax strategy and policies are reviewed on an on-going basis by the Audit Committee and Board of Directors. Our tax status is reported regularly through the Group's Finance ability Governance Group, chaired by the Chief Finance Officer. Tax status is also reported via the Audit and Risk Committee through the Group's Strategic Risk Register.

Tax strategy and policy issues are assessed on a case-by-case basis by the Tax Team with appropriate input from the Head of Corporate Finance, Chief Finance Officer in conjunction with the Chief Executive Officer. Day-to-day tax matters are delegated to the Head of Corporate Finance and a team of in-house professionals who hold a combination of accounting and tax qualifications.

Current tax reconciliation & analysis

The table below reconciles the difference between:

- the tax charge that would be expected if the standard rate of corporation tax in the UK (19%) was applied to profit before tax and fair value movements; and
- the appointed current tax charge for the year.

	£m
Profit before tax and fair value movements in relation to appointed activities	21.1
Tax charge at the standard rate of corporation tax in the UK of 19%	4.0
Adjustments in relation to assets	
Non-deductible accounting depreciation on fixed assets and amortisation of intangible assets	41.7
Potential capital allowances available to claim on fixed assets (1)	(56.6)
Capital allowances waived and deferred to future years (1)	43.3
Adjustments in relation to financial instruments	
Adjustment to allow an element of the company's fair value losses as they represent an accruals basis of accounting which is deductible for tax purposes	(21.5)
Other adjustments	
Effect of chargeable gains	(0.8)
Deductible payments to pension scheme	(3.6)
Employee remuneration accrued but not deductible until paid	0.1
Non-deductible costs (2)	0.8
Non-taxable profits (3)	(1.2)
Adjustments in relation to prior years	0.1
Appointed current tax charge (4)	6.3

1. The company has claimed tax losses in the year from other Kelda Group companies. As a result, the company has reduced its capital allowance claim on its capital expenditure for the year. This tax relief is deferred to later periods. Utilising tax losses in this way and deferring capital allowances will ultimately benefit customers through lower bills in the future.
2. Non-deductible costs mainly relate to transfer pricing adjustments, non-deductible professional fees, operating expenditure which is capital for tax purposes and other accounting adjustments.
3. Income reflected in the accounts which is not subject to tax as either there is no cash received by the company or the income has reduced the amount of capital allowances that can be claimed on the assets associated with the income. This amount also includes R&D credit income that has been subject to tax in previous periods.
4. The appointed current tax charge represents payments to other Kelda Group companies as compensation for them surrendering tax losses to the company. The company has no current tax charge for the year in relation to corporation tax liabilities owed to HM Revenue & Customs.

The current tax charge allowed in price limits is reconciled to the appointed current tax charge as follows:

	£m
Total current tax charge/(credit) allowed in price limits (based on corporation tax rate of 19% used in setting prices)	(1.2)
Tax effect of differences due to:	
Lower operating profit	(27.8)
Higher finance costs included in corporation tax calculations	(18.6)
Fixed assets	
Assumptions regarding allowable depreciation and potential capital allowance claims	14.5
Capital allowances waived and deferred to future years (1)	43.3
Effect of chargeable gains	(2.6)
Other	
Assumptions regarding pension deductions	(0.9)
Assumptions regarding non tax deductible expenses (2)	(0.5)
Prior year adjustments	0.1
Appointed current tax charge (3)	6.3

1. The company has claimed tax losses in the year from other Kelda Group companies. As a result, the company has reduced its capital allowance claim on its capital expenditure for the year. This tax relief is deferred to later periods. Utilising tax losses in this way and deferring capital allowances will ultimately benefit customers through lower bills in the future.

2. This mainly relates to transfer pricing adjustments, fines and capital expenditure for tax purposes included in operating costs and non-deductible accrued employee remuneration.

3. The appointed current tax charge represents payments to other Kelda Group companies as compensation for them surrendering tax losses to the company. The company has no current tax charge for the year in relation to corporation tax liabilities owed to HM Revenue & Customs.

Factors that will impact future tax charges will include:

- changes in corporation tax rates and capital allowance rates;
- any changes in tax legislation or practice not reflected in the relevant FD.

Table 1B**Statement of comprehensive income for the 12 months ended 31 March 2022**

Line description	Units	DPs	Statutory	Adjustments			Total appointed activities	RAG 4 reference
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments		
Profit for the year	£m	3	-356.208	2.622	1.060	1.562	-354.646	1B.1
Actuarial gains/(losses) on post-employment plans	£m	3	0.066	0.000	0.000	0.000	0.066	1B.2
Other comprehensive income	£m	3	687.884	0.000	0.000	0.000	687.884	1B.3
Total Comprehensive income for the year	£m	3	331.742	2.622	1.060	1.562	333.304	1B.4

Statement of comprehensive income

The statement of comprehensive income sets out all items which result in a change to our balance sheet reserves. The statutory loss for the year of £356.2m is adjusted for actuarial gains on post-employment plans of £0.1m, and other comprehensive income of £687.9m. Other comprehensive income comprises a revaluation gain on fixed assets before taxation of £901.8m, less related deferred tax on the revaluation of £243.4m, plus the net effect of cash flow hedges amounting to £29.5m.

In respect of the fixed asset revaluation, we have a policy under FRS 102 of holding infrastructure assets (networks), residential properties, non-specialised properties and rural estates under a valuation model. The fair value of assets must be reviewed periodically under FRS 102.

The infrastructure assets have been revalued during the year resulting in an increase in their value of £901.8m before deferred tax. The valuation amount was established by reviewing the discounted cash flows of Yorkshire Water to establish the assets' value in use and cross referenced against recent market data regarding Regulated Capital Value (RCV) multiples realised in transactions of similar infrastructure businesses to make sure the valuation was not misaligned to market valuation.

The infrastructure asset valuation is based on a specialist third-party independent valuation of Yorkshire Water, providing an indication of the premium that could be achieved if the business was to be sold. The range is wider this year than in previous years due to a number of factors, including the increase in the discount rate range to 100bps and the various transactions observed in the market (at a wide range of enterprise values/RCV multiples). The valuation this year has resulted in an uplift of £901.8m.

The cash flow hedges arise from energy price swaps which hedge our exposure to energy price risk by exchanging the day ahead index price of energy for a fixed price. These swaps meet the criteria to be designated as a cashflow hedge, and the increase in the fair value of the energy price swap of £29.5m has been recognised directly in reserves through the statement of comprehensive income.

There is a net actuarial gain on the pension scheme of £0.1m within Yorkshire Water, with a corresponding adjustment to tax of £0.1m, resulting in a net adjustment to other comprehensive income of £nil. The defined benefit plan is a multi-employer scheme, and the sponsoring employer is Kelda Group Limited.

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 1C**Statement of financial position for the 12 months ended 31 March 2022**

				Adjustments				
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities	RAG 4 reference
Line description	Units	DPs	Statutory					
Non-current assets								
Fixed assets	£m	3	9,236.674	-143.917	2.724	-146.641	9,090.033	1C.1
Intangible assets	£m	3	175.647	0.000	0.000	0.000	175.647	1C.2
Investments – loans to group companies	£m	3	933.143	0.000	0.000	0.000	933.143	1C.3
Investments – other	£m	3	2.245	0.000	0.000	0.000	2.245	1C.4
Financial instruments	£m	3	172.156	0.000	0.000	0.000	172.156	1C.5
Retirement benefit assets	£m	3	0.000	0.000	0.000	0.000	0.000	1C.6
Total non-current assets	£m	3	10,519.866	-143.917	2.724	-146.641	10,373.225	1C.7
Current assets								
Inventories	£m	3	6.608	0.000	0.000	0.000	6.608	1C.8
Trade & other receivables	£m	3	268.163	0.000	3.762	-3.762	264.401	1C.9
Financial instruments	£m	3	44.324	0.000	0.000	0.000	44.324	1C.10
Cash & cash equivalents	£m	3	28.505	0.000	0.000	0.000	28.505	1C.11
Total current assets	£m	3	347.600	0.000	3.762	-3.762	343.838	1C.12
Current liabilities								
Trade & other payables	£m	3	-315.442	3.178	-10.187	13.365	-302.077	1C.13
Capex creditor	£m	3	-122.752	0.000	0.000	0.000	-122.752	1C.14
Borrowings	£m	3	-570.106	-2.353	0.000	-2.353	-572.459	1C.15
Financial instruments	£m	3	0.000	0.000	0.000	0.000	0.000	1C.16
Current tax liabilities	£m	3	0.000	0.000	0.000	0.000	0.000	1C.17
Provisions	£m	3	-12.362	3.987	0.000	3.987	-8.375	1C.18
Total current liabilities	£m	3	-1,020.662	4.812	-10.187	14.999	-1,005.663	1C.19
Net Current assets/(liabilities)	£m	3	-673.061	4.812	-6.425	11.237	-661.825	1C.20

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 1C – Continued

Statement of financial position for the 12 months ended 31 March 2022

				Adjustments				
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities	RAG 4 reference
Line description	Units	DPs	Statutory					
Non-current liabilities								
Trade & other payables	£m	3	-1.193	0.000	0.000	0.000	-1.193	1C.21
Borrowings	£m	3	-4,886.892	-9.841	0.000	-9.841	-4,896.732	1C.22
Financial instruments	£m	3	-2,630.873	0.000	0.000	0.000	-2,630.873	1C.23
Retirement benefit obligations	£m	3	0.000	0.000	0.000	0.000	0.000	1C.24
Provisions	£m	3	-11.771	0.000	0.000	0.000	-11.771	1C.25
Deferred income – grants & contributions	£m	3	-353.273	-1.663	-1.612	-0.051	-353.324	1C.26
Deferred income – adopted assets	£m	3	-198.185	44.031	0.000	44.031	-154.154	1C.27
Preference share capital	£m	3	0.000	0.000	0.000	0.000	0.000	1C.28
Deferred tax	£m	3	-656.188	37.530	0.000	37.530	-618.659	1C.29
Total non-current liabilities	£m	3	-8,738.375	70.057	-1.612	71.669	-8,666.706	1C.30
Net assets	£m	3	1108.430	-69.048	-5.312	-63.736	1044.694	1C.31
Equity								
Called up share capital	£m	3	11.000	0.000	0.000	0.000	11.000	1C.32
Retained earnings & other reserves	£m	3	1,097.430	-69.048	-5.312	-63.736	1,033.694	1C.33
Total Equity	£m	3	1,108.430	-69.048	-5.312	-63.736	1,044.694	1C.34

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Statement of financial position

Table 1C takes the Balance Sheet as at 31 March 2022 detailed in the ARFS and makes adjustments for the differences between UK statutory financial reporting and regulatory financial reporting, together with removal of the non-appointed assets and liabilities. This then details the Balance Sheet of the appointed business.

The table below details the total adjustment of £69.0m to retained earnings and reserves and the corresponding adjustments to fixed assets, borrowings, deferred income and deferred tax. This comprises the differences between statutory and RAG definitions which are the balance sheet equivalent adjustments to those income statement adjustments described in more detail in the narrative to [Table 1A](#).

Line description	Grant & Contribution (G&C) Income	IFRIC 18	Capitalisation of interest and related depreciation	IFRS 15 Revenue Recognition	Innovation Fund	IFRS 16 Leases	Total
Line 1C.1 Fixed assets			(155.340)			(11.423)	(143.917)
Line 1C.9 Trade and other receivables				-			-
Line 1C.13 Trade & other payables					3.178		3.178
Line 1C.15 Borrowings (current)						(2.353)	(2.352)
Line 1C.18 Provisions (current)					3.987		3.987
Line 1C.22 Borrowings (non-current)						(9.841)	(9.841)
Line 1C.26 Deferred income - G&Cs	(1.663)						(1.663)
Line 1C.27 Deferred income - adopted assets		44.031					44.031
Line 1C.29 Deferred tax			38.835		(1.791)	0.486	37.530
Line 1C.33 Retained earnings & other reserves	(1.663)	44.031	(116.505)		5.374	(0.285)	(69.048)

Technical notes

As detailed in [Table 1B](#) and the statutory accounts, infrastructure assets (networks), residential properties, non-specialised properties and rural estates are held under a revaluation model, rather than historical cost. Whilst regulatory accounting guidance refers only to historical cost, given that UK GAAP FRS102 offers the choice between historical cost and valuation, and the regulatory guidance does not identify the requirement to re-state fixed assets for those adjustments, no adjustment has been made. This is consistent with the treatment in 2020/2021 and previous years.

Table 1D
Statement of cash flows for the 12 months ended 31 March 2022

				Adjustments				
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities	RAG 4 reference
Line description	Units	DPs	Statutory					
Operating activities								
Operating profit	£m	3	250.730	-4.420	1.175	-5.595	245.135	1D.1
Other income	£m	3	35.859	-32.188	0.138	-32.327	3.532	1D.2
Depreciation	£m	3	333.504	-2.121	0.161	-2.282	331.222	1D.3
Amortisation – Grants & contributions	£m	3	-12.347	12.347	0.000	12.347	0.000	1D.4
Changes in working capital	£m	3	7.036	0.000	4.979	-4.979	2.056	1D.5
Pension contributions	£m	3	-12.376	0.000	0.000	0.000	-12.376	1D.6
Movement in provisions	£m	3	9.714	-3.465	-6.454	2.989	12.703	1D.7
Profit on sale of fixed assets	£m	3	-7.044	0.000	0.000	0.000	-7.044	1D.8
Cash generated from operations	£m	3	605.076	-29.848	0.000	-29.848	575.228	1D.9
Net interest paid	£m	3	-112.753	-0.218	0.000	-0.218	-112.971	1D.10
Tax paid	£m	3	-15.339	0.000	0.000	0.000	-15.339	1D.11
Net cash generated from operating activities	£m	3	476.984	-30.067	0.000	-30.067	446.917	1D.12
Investing activities								
Capital expenditure	£m	3	-403.316	0.000	0.000	0.000	-403.316	1D.13
Grants & Contributions	£m	3	0.000	31.954	0.000	31.954	31.954	1D.14
Disposal of fixed assets	£m	3	7.046	0.000	0.000	0.000	7.046	1D.15
Other	£m	3	1.657	0.000	0.000	0.000	1.657	1D.16
Net cash used in investing activities	£m	3	-394.613	31.954	0.000	31.954	-362.659	1D.17
Net cash generated before financing activities	£m	3	82.371	1.887	0.000	1.887	84.258	1D.18

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Table 1D – Continued

Statement of cash flows for the 12 months ended 31 March 2022

				Adjustments				
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities	RAG 4 reference
Line description	Units	DPs	Statutory					
Cash flows from financing activities								
Equity dividends paid	£m	3	-52.559	0.000	0.000	0.000	-52.559	1D.19
Net loans received	£m	3	-199.206	-1.887	0.000	-1.887	-201.094	1D.20
Cash inflow from equity financing	£m	3	0.000	0.000	0.000	0.000	0.000	1D.21
Net cash generated from financing activities	£m	3	-251.765	-1.887	0.000	-1.887	-253.652	1D.22
Increase (decrease) in net cash	£m	3	-169.394	0.000	0.000	0.000	-169.394	1D.23

Statement of cashflows

Yorkshire Water Services is not required to publish a cashflow statement in the statutory accounts as the consolidated financial statements of Kelda Eurobond Co Limited include the equivalent disclosures. The company has also taken certain exemptions under FRS 102 available in respect of the disclosures required by FRS 102.11 Basic Financial Instruments and FRS 102.12 Other Financial Instrument Issues.

The cashflow information in [Table 1D](#) is derived from the published Profit & Loss account and Balance Sheet information. Similar to [Tables 1A](#) and [1C](#), Table 1D captures the adjustments needed to both reflect differences between statutory financial reporting in accordance with UK GAAP and regulatory financial reporting, and remove non-appointed cashflows to determine the cashflow statement for the appointed business.

Overall, there was a net cash decrease of £169.4m for 2021/2022. Cash generated from operations of £575.2m was primarily offset by:

- Cash investment in fixed assets including investment in tangible and intangible assets of £403.3m;
- Interest paid of £113.0m on borrowings taken out to fund historical and current capital investment programmes;

Dividends paid to fund interest on other borrowings taken out on behalf of Yorkshire Water elsewhere in the Kelda group and dividends to the owners of Yorkshire Water totalling £52.6m as detailed in [Table 1A](#) commentary; and

- Repayment of borrowings of £201.1m.

£32.0m in relation to Grants and Contributions and adopted sewers under IFRIC 18 has been treated as cash generated from operations in the statutory cash flow and is included within Other Income (line 1D.2). In accordance with the RAGs this has been moved to Grants and Contributions (line 1D.14) within Investing activities. A further adjustment has been reflected within the other income statutory to RAG adjustment so that the amortisation of grants and contributions (£12.3m) is not included as a statutory to RAG cashflow adjustment to other income, as it is a non-cash movement.

Included in line 1D.16 is £1.657m relating to deferred consideration on the sale of the non-household retail customer business in the year ended 31 March 2020. This has been reflected in the tables on a consistent basis to the original transaction in 2020.

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The table below details the adjustments to the cash flow statement due to differences between statutory and RAG definitions. These are the cash flow equivalent adjustments to those income statement adjustments described in more detail in the narrative to [Table 1A](#).

Line description	Grant & Contribution (G&C) Income	IFRIC 18	Capitalisation of interest and related depreciation	IFRS 15 Revenue Recognition	Innovation Fund	IFRS 16 Leases	Total
Line 1D.1 Operating profit	(9.873)	(2.473)	4.779		3.700	(0.553)	(4.420)
Line 1D.2 Other income	(34.427)	2.473			(0.235)		(32.189)
Line 1D.3 Depreciation			(4.779)			2.658	(2.121)
Line 1D.4 Amortisation – G&C's	12.347						12.347
Line 1D.7 Movement in provisions					(3.465)		(3.465)
Line 1D.10 Net interest paid						(0.218)	(0.218)
Line 1D.13 Grants & Contributions	31.954						31.954
Line 1D.20 Net loans received						(1.887)	(1.887)
Total	-	-	-	-	-	-	-

Table 1E
Net debt analysis (appointed activities) at 31 March 2022

					Index linked			
Line description	Units	DPs	Fixed rate	Floating rate	RPI	CPI/CPIH	Total	RAG 4 reference
Interest rate risk profile								
Borrowings (excluding preference shares)	£m	3	2,865.792	-483.859	3,126.073	135.295	5,643.301	1E.1
Preference share capital	£m	3					0.000	1E.2
Total borrowings	£m	3					5,643.301	1E.3
Cash	£m	3					-28.503	1E.4
Short term deposits	£m	3					-0.002	1E.5
Net Debt	£m	3					5,614.796	1E.6
Gearing								
Gearing	%	3					72.487%	1E.7
Adjusted Gearing	%	3					73.400%	1E.8
Interest								
Full year equivalent nominal interest cost	£m	3	60.754	5.941	420.637	10.308	497.640	1E.9
Full year equivalent cash interest payment	£m	3	60.754	5.941	90.685	0.734	158.114	1E.10
Indicative interest rates								
Indicative weighted average nominal interest rate	%	3	2.120%	-1.230%	13.460%	7.620%	8.820%	1E.11
Indicative weighted average cash interest rate	%	3	2.120%	-1.230%	2.900%	0.540%	2.800%	1E.12
Time to maturity								
Weighted average years to maturity	nr	3	10.790	46.180	22.090	7.450	13.940	1E.13

Table 1E contains information about our financing structure and the associated interest costs of that financing.

Interest payable and interest receivable on our borrowings is on either a fixed rate, floating rate or inflation linked basis and the company manages the issuance of new debt to ensure that Yorkshire Water's debt maturity profile avoids repayment concentrations, meaning that we avoid the situation where large amounts of debt must be re-paid at the same time. This assists with the company's future refinancing requirements.

Our debt has a weighted average years to maturity (line 1E.13) of approximately 14 years, which is consistent with the planned approach to the company's financing requirements.

Borrowings include all debt relevant to the regulated company even where this has been taken out by a financing subsidiary. Borrowings in 1E.1 include borrowings at a group level which are relevant to the regulated company including the accretion of index linked swaps and do not include any fair value adjustments or unamortised loan costs. This means, consistent with the prior year, there is a difference between borrowings reported in [Table 1C](#) and [Table 1E](#) and the table below provides a reconciliation of the difference.

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Reconciliation of borrowing amounts contained within table 1C.15 & 22 to table 1E.1

Table 1C:	£
1C.15 – Borrowings (Current liabilities)	(572.4)
1C.22 – Borrowings (Non-Current liabilities)	(4,896.7)
Table 1C – Borrowings	(5,469.2)
Adjustments:	
(i) Fair value adjustments of bonds held in subsidiary companies included in Table 1C but not included in Table 1E	28.5
(ii) Accretion of IL swaps not included in Table 1C but included in Table 1E.	(197.8)
(iii) The difference in the book value of internal loans that were exchanged. 1C includes the value reported in Yorkshire Water Services Limited and 1E includes the embedded value of the loans taken out by the financing subsidiary.	13.0
(iv) Unamortised issue costs are included in Table 1C but not included in Table 1E.	(17.9)
Total adjustments	(174.2)
Table 1E – Borrowings	(5,643.3)

1E.7: This contains Yorkshire Water’s regulatory gearing, the calculation of which is “Net Debt” as provided in table 1E row 6, divided by the company’s RCV as provided in [Table 4C.26](#).

1E.8: This represents Yorkshire Water Senior RAR (the definition of which is contained within the terms of Yorkshire Water’s Whole Business Securitisation structure). Actual and forecast amounts of Yorkshire Water’s Senior RAR are published twice a year within Compliance Certificates (which is required as part of the terms of Yorkshire Water’s Whole Business Securitisation structure). These can be found within the ‘Investor Centre’ section of the Kelda Group website at

1E.9–12: Contains the full year equivalent nominal and cash interest along with indicative weighted average interest rates.

Fixed interest has increased year on year as a result of issuing new debt.

An increase in market variable rates, in the year, has increased interest receivable on swaps to a greater extent than interest payable on floating rate debt, which in conjunction with debt repayment has led to an overall decrease in the net floating interest charge.

Retail price inflation has increased from 1.5 per cent at 31 March 2021 to 9.0 per cent at 31 March 2022, which is the primary cause of the year on year increase in the weighted average nominal interest rate of indexed linked debt.

1E.13: weighted average years to maturity. The weighted average maturity has remained broadly consistent at 14 years.

Technical notes: Yorkshire Water and its financing subsidiaries raise debt finance from a number of sources including, amongst other areas, bank debt, bond debt and finance leases. Any borrowings raised by Yorkshire Water’s financing subsidiaries are on-lent to Yorkshire Water, with Yorkshire Water paying interest to those subsidiaries on the same terms as the financing subsidiaries have borrowed at. This is illustrated in the diagram below.

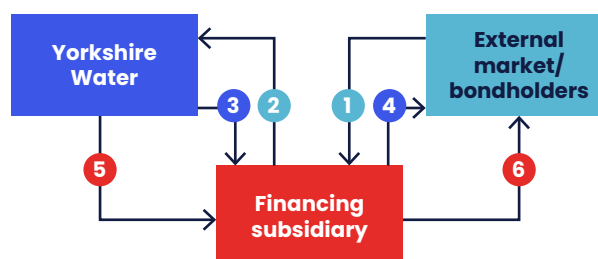


Illustration of borrowing by Yorkshire Water finance subsidiary and on-lending to Yorkshire Water

A. Debt raised:

1. Financing subsidiary raises £100m fixed rate bond from the external market with a coupon payable of 5.0% per annum with a maturity of 10 years.
2. Financing subsidiary lends the £100m debt raised to Yorkshire Water.

B. Annual interest payments

3. Yorkshire Water pays £5m interest to Financing subsidiary on an annual basis.
4. Financing subsidiary pays £5m interest to external bond holders on an annual basis.

C. Debt repaid

5. Yorkshire Water pays back £100m to Financing subsidiary on maturity date.
6. Financing subsidiary repays bond holders £100m on maturity date.

Table 1F (Ofwat)

Financial flows for the 12 months ended 31 March 2022 and for the price review to date

			12 months ended 31 March 2022							Average 2020–2025						
Line description			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	RAG 4 reference	
			Units	%	£m			%			£m					
			DPs	2	3			2			3					
Regulatory equity																
Regulatory equity	£m	3	2733.211	2733.211	1897.149				2685.748	2685.748	1689.875				1F.1	
Return on regulatory equity																
Return on regulatory equity	See Column Heading		4.37%	3.03%	4.37%	119.359	82.848	82.848	4.36%	2.74%	4.36%	117.045	73.645	73.645	1F.2	
Financing																
Impact of movement from notional gearing	See Column Heading			1.34%	0.96%		36.511	18.281		1.62%	1.14%		43.400	21.675	1F.3	
Gearing benefits sharing	See Column Heading			0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000	1F.4	
Variance in corporation tax	See Column Heading			1.38%	1.98%		37.606	37.606		0.57%	0.82%		15.642	15.642	1F.5	
Group relief	See Column Heading			0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000	1F.6	
Cost of debt	See Column Heading			0.81%	1.40%		22.031	26.523		0.44%	0.76%		11.971	14.496	1F.7	
Hedging instruments	See Column Heading			−3.18%	−5.52%		−86.916	−104.641		−1.73%	−3.03%		−47.396	−57.408	1F.8	
Return on regulatory equity including Financing adjustments	See Column Heading		4.37%	3.37%	3.20%	119.359	92.080	60.617	4.36%	3.63%	4.06%	117.045	97.262	68.050	1F.9	

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Table 1F (Ofwat) – Continued

Financial flows for the 12 months ended 31 March 2022 and for the price review to date

		12 months ended 31 March 2022						Average 2020–2025						RAG 4 reference
		Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	
Line description														
Units		%		£m		%		%		£m		£m		
DPs		2		3		2		2		3				
Operational Performance														
Totex out/(under) performance	See Column Heading		-0.89%	-1.28%		-24.271	-24.271		-1.21%	-1.74%		-33.031	-33.031	1F.10
ODI out/(under) performance	See Column Heading		-0.57%	-0.82%		-15.580	-15.580		-0.61%	-0.88%		-16.705	-16.705	1F.11
C-MeX out/(under) performance	See Column Heading		0.00%	0.00%		0.000	0.000		0.02%	0.02%		0.466	0.466	1F.12
D-MeX out/(under) performance	See Column Heading		0.00%	0.00%		0.000	0.000		-0.11%	-0.15%		-2.884	-2.884	1F.13
Retail out/(under) performance	See Column Heading		-0.84%	-1.21%		-22.895	-22.895		-0.67%	-0.97%		-18.340	-18.340	1F.14
Other exceptional items	See Column Heading		0.06%	0.09%		1.771	1.771		0.04%	0.06%		1.099	1.099	1F.15
Operational performance total	See Column Heading		-2.23%	-3.21%		-60.975	-60.975		-2.54%	-3.66%		-69.395	-69.395	1F.16
RoRE (return on regulatory equity)	See Column Heading	4.37%	1.14%	-0.02%	119.359	31.105	-0.358	4.36%	1.10%	0.41%	117.045	27.867	-1.345	1F.17
RCV growth	See Column Heading	7.24%	7.24%	7.24%	197.884	197.884	137.354	4.20%	4.20%	4.20%	112.801	112.801	70.975	1F.18
Voluntary sharing arrangements			-0.07%	-0.10%		-1.843	-1.843		-0.07%	-0.11%		-1.877	-1.877	1F.19

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Table 1F (Ofwat) – Continued

Financial flows for the 12 months ended 31 March 2022 and for the price review to date

		12 months ended 31 March 2022						Average 2020–2025						
Line description		Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	RAG 4 reference
	Units	%		£m			%		£m					
	DPs	2		3			2		3					
Total shareholder return	See Column Heading	11.61%	8.31%	7.12%	317.244	227.147	135.153	8.56%	5.23%	4.49%	229.846	138.791	67.753	1F.20
Dividends														
Gross Dividend	See Column Heading	3.18%	1.84%	2.65%	86.916	50.202	50.202	3.18%	1.74%	2.76%	85.407	46.678	46.678	1F.21
Interest Receivable on Intercompany loans	See Column Heading		–0.99%	–1.43%		–27.109	–27.109		–1.13%	–1.79%		–30.308	–30.308	1F.22
Retained Value	See Column Heading	8.43%	7.47%	5.91%	230.328	204.054	112.060	5.38%	4.62%	3.53%	144.440	122.421	51.383	1F.23
Cash impact of 2015–2020 performance adjustments														
Totex out/under performance	See Column Heading		0.02%	0.03%		0.528	0.528		0.02%	0.03%		0.528	0.528	1F.24
ODI out/under performance	See Column Heading		0.69%	0.99%		18.809	18.809		0.70%	1.11%		18.809	18.809	1F.25
Total out/under performance	See Column Heading		0.71%	1.02%		19.337	19.337		0.72%	1.14%		19.337	19.337	1F.26

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Table 1F (Yorkshire Water)

Financial flows for the 12 months ended 31 March 2022 and for the price review to date

			12 months ended 31 March 2022							Average 2020–2025							
Line description			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	RAG 4 reference		
			Units	%		£m		%		£m							
DPs			2			3			2			3					
Regulatory equity																	
Regulatory equity	£m	3	2733.211	2733.211	1897.149				2685.748	2685.748	1689.875				1F.1		
Return on regulatory equity																	
Return on regulatory equity	See Column Heading		4.37%	3.03%	4.37%	119.359	82.848	82.848	4.36%	2.74%	4.36%	117.045	73.645	73.645	1F.2		
Financing																	
Impact of movement from notional gearing	See Column Heading			1.34%	0.96%		36.511	18.281		1.62%	1.14%		43.400	21.675	1F.3		
Gearing benefits sharing	See Column Heading			0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000	1F.4		
Variance in corporation tax	See Column Heading			1.38%	1.98%		37.606	37.606		0.57%	0.82%		15.642	15.642	1F.5		
Group relief	See Column Heading			0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000	1F.6		
Cost of debt	See Column Heading			0.81%	1.40%		22.031	26.523		0.44%	0.76%		11.971	14.496	1F.7		
Hedging instruments	See Column Heading			−3.18%	−5.52%		−86.916	−104.641		−1.73%	−3.03%		−47.396	−57.408	1F.8		
Return on regulatory equity including Financing adjustments	See Column Heading		4.37%	3.37%	3.20%	119.359	92.080	60.617	4.36%	3.63%	4.06%	117.045	97.262	68.050	1F.9		

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 1F (Yorkshire Water) – Continued

Financial flows for the 12 months ended 31 March 2022 and for the price review to date

		12 months ended 31 March 2022						Average 2020–2025						
		Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	RAG 4 reference
Line description														
Units		%		£m		%		£m						
DPs		2		3		2		3						
Operational Performance														
Totex out/(under) performance	See Column Heading		-0.89%	-1.28%		-24.271	-24.271		-1.21%	-1.74%		-33.031	-33.031	1F.10
ODI out/(under) performance	See Column Heading		-0.57%	-0.82%		-15.580	-15.580		-0.61%	-0.88%		-16.705	-16.705	1F.11
C-MeX out/(under) performance	See Column Heading		0.00%	0.00%		0.000	0.000		0.02%	0.02%		0.466	0.466	1F.12
D-MeX out/(under) performance	See Column Heading		0.00%	0.00%		0.000	0.000		-0.11%	-0.15%		-2.884	-2.884	1F.13
Retail out/(under) performance	See Column Heading		-0.84%	-1.21%		-22.895	-22.895		-0.67%	-0.97%		-18.340	-18.340	1F.14
Other exceptional items	See Column Heading		0.06%	0.09%		1.771	1.771		0.04%	0.06%		1.099	1.099	1F.15
Operational performance total	See Column Heading		-2.23%	-3.21%		-60.975	-60.975		-2.54%	-3.66%		-69.395	-69.395	1F.16
RoRE (return on regulatory equity)	See Column Heading	4.37%	1.98%	1.51%	119.346	54.073	28.600	4.36%	1.34%	1.08%	117.046	34.584	8.600	1F.17
RCV growth	See Column Heading	7.24%	7.24%	7.24%	197.884	197.884	137.354	4.20%	4.20%	4.20%	112.793	112.793	70.969	1F.18
Voluntary sharing arrangements			-0.07%	-0.10%		-1.843	-1.843		-0.07%	-0.11%		-1.877	-1.877	1F.19

Key

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 1F (Yorkshire Water) – Continued

Financial flows for the 12 months ended 31 March 2022 and for the price review to date

		12 months ended 31 March 2022						Average 2020–2025						
Line description		Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	RAG 4 reference
	Units	%			£m			%			£m			
	DPs	2			3			2			3			
Total shareholder return	See Column Heading	11.61%	8.31%	7.12%	317.244	227.147	135.153	8.56%	5.23%	4.49%	229.846	138.791	67.753	1F.20
Dividends														
Gross Dividend	See Column Heading	3.18%	1.84%	2.65%	86.916	50.202	50.202	3.18%	1.74%	2.76%	85.407	46.678	46.678	1F.21
Interest Receivable on Intercompany loans	See Column Heading		–0.99%	–1.43%		–27.109	–27.109		–1.13%	–1.79%		–30.308	–30.308	1F.22
Retained Value	See Column Heading	8.43%	7.47%	5.91%	230.328	204.054	112.060	5.38%	4.62%	3.53%	144.440	122.421	51.383	1F.23
Cash impact of 2015–2020 performance adjustments														
Totex out/under performance	See Column Heading		0.02%	0.03%		0.528	0.528		0.02%	0.03%		0.528	0.528	1F.24
ODI out/under performance	See Column Heading		0.69%	0.99%		18.809	18.809		0.70%	1.11%		18.809	18.809	1F.25
Total out/under performance	See Column Heading		0.71%	1.02%		19.337	19.337		0.72%	1.14%		19.337	19.337	1F.26

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Table 1F has been developed by Ofwat to improve financial transparency. It aims to enable a comparison between actual financial flows to the company's investors under the actual capital structures which companies have adopted, and what they would have been under the notional structure Ofwat have used for setting the prices that customers pay.

We are continuing to discuss with Ofwat the development of table 1F and whilst we still have areas that we would like to be considered further we have followed our 2020/2021 APR process and have included a second version of the table to attempt to show the impact of areas where we remain in discussion with Ofwat.

The lines which are impacted are:

- 1F.2 (Return on regulatory equity)
- 1F.3 (Impact of movement from notional gearing)
- 1F.7 (Cost of debt)

Return on regulatory equity (lines 1-2)

1F.1: The notional equity was provided by Ofwat, the actual equity was calculated in line with the guidance from Ofwat.

1F.2: This value was provided by Ofwat and is the adjusted return on regulated equity as calculated in the FD19 financial model for the current year.

In our [YWS] table we have amended this row to show the base return on regulatory equity for each scenario removing the requirement for line 1F.3.

Financing (lines 3-9)

1F.3: In our [YWS] table we have not included an amount in 1F.3 for a gearing related adjustment to the return on regulatory equity. This reflects consideration of the conclusions of the CMA PR19 appeal that total returns should be broadly unaffected by gearing.

In particular, we aim to remove the confusion that is likely to be caused by reporting a return of 1.34% as an "impact of movement from notional gearing" within the notional regulatory equity column, which is based upon a notional gearing structure. Within our YWS alternative 1F table we have reported this within line 1F.2 so that there is a consistent 4.37% base return across all columns using the notional gearing structure.

1F.4: This is a zero value as the Gearing Outperformance Sharing Mechanism (GOSM) does not apply to YW as per the CMA FD.

1F.5: This is calculated in line with Ofwat guidance, however we believe the calculation needs to consider:

- The appropriateness of including deferred capital allowances as this is a timing impact and not a benefit to shareholders. This reflects the fact that capital allowance pools are reset at the beginning of each AMP and customers will therefore benefit in the future.
- The impact of losses that are disregarded due to starting with PBT before fair value adjustments, which are utilised by the company ahead of capital allowances to efficiently manage its current and future tax charge to the benefit of our customers.

Therefore we believe that the calculated variance in row 1F.5 is not representative when considering the return on regulated equity, especially when it is considered that our FD19 allowance in year 2021/2022 was only £1.28m.

We would like to discuss this further when Ofwat has taken the opportunity to review all of the industry returns.

1F.6: This is a zero value. From 2017/2018 all losses surrendered to YW by other group companies have been paid for in full at the current rate of corporation tax, so there is no financial benefit shown within the table.

1F.7: The cost of debt impact (excluding hedging instruments) has been calculated in line with Ofwat guidance.

Within our [YWS] table we have shown an amended value for this line due to the continued discussion with Ofwat as to whether there is an inconsistency between the use of a purely CPIH stripped notional cost of debt, versus a weighted RPI/CPIH return on regulatory equity and a weighted RPI/CPIH RCV growth value.

We have calculated the weighted RPI/CPIH notional cost of debt to be 1.93% versus the purely CPIH stripped equivalent of 2.34%. We have also used a weighted RPI/CPIH deflation of 4.63% (CPIH 3.66%) to calculate our actual cost of debt.

1F.8: We have assessed the impact of our hedging instruments on our overall cost of debt. In the current year we have calculated that our hedging instruments have increased our overall nominal interest rate by 2.12%.

The impact of our hedging instruments on reported nominal interest rates is heavily impacted by the high inflation experienced in the year, as the majority of our hedging instruments are index-linked. In comparison, when considered on a cash basis our hedging instruments reduce our total cash interest cost by 0.23%.

Operational Performance (lines 10–22)

1F.10: This is taken from [Table 4C](#) line 21 and deflated to 2017/2018 CPIH average prices.

1F.11: This is the ODI net penalty as reported within the ODI performance model. Whilst we have included our reported ODI position for 2021/2022, we have submitted a request for an intervention for the impact of Storm Arwen to be taken into consideration.

1F.12: In period values have been included as zero until the values have been supplied by Ofwat, average is based on the published to date values.

1F.13: In period values have been included as zero until the values have been supplied by Ofwat, average is based on the published to date values.

1F.14: This has been calculated by comparing the adjusted allowance for retail operating costs, household and the actual costs as reported in table “2C –Operating cost analysis –retail” and then the variance has been deflated to 2017/2018 CPIH average prices.

1F.15: We have included the additional £1.7m of proceeds from the sales of the NHH retail business which took place in October 2019 and a 50% share of the proceeds of land sales as reported in [Table 2L](#). This has been deflated to 2017/2018 CPIH average prices.

1F.17: This is a calculated line (sum of lines 1F.9 and 1F.16) and is reported in line 4H.5.

1F.18: This is provided by Ofwat.

1F.19: We have included the £2m per annum revenue sacrifice within household retail, this £2m is used to support customers on our social tariff WaterSupport, this has been deflated to 2017/2018 CPIH average prices.

Dividends (lines 21–23)

1F.21: The notional dividend of 3.18% was provided by Ofwat.

We have included the actual gross dividends that were paid from the appointed company within the relevant years. This has been deflated to 2017/2018 CPIH average prices.

1F.22: We have included the value of interest that the appointed company receives in the year on inter-company loans, less amounts paid in group relief to reflect the amount of dividends paid from the appointed company to fund inter-company interest paid back to the appointed company.

This has been deflated to 2017/2018 CPIH average prices.

Cash impact of 2015–2020 performance adjustments

1F.24–26: As per published financial flows data

Statement on RoRE

4H.5: The calculation for RoRE is undertaken in [Table 1F](#). The value is taken from line 1F.17,

As we are continuing to discuss with Ofwat the development of [Table 1F](#) we have followed our 2020/2021 APR process, and have included a second version of [Table 1F](#) to attempt to show the impact of areas where we remain in discussion with Ofwat.

The lines which are impacted are:

- 1F.2 (Return on regulatory equity)
- 1F.3 (Impact of movement from notional gearing)
- 1F.7 (Cost of debt)

The movements on the base return are shown below, and we have included both version (Ofwat and YW) of the values, further detail on the movements can be found in [Table 1F](#):

	Ofwat 2021/2022	YW 2021/2022	Ofwat AMP7	YW AMP7
Return on regulatory equity	3.03%	4.37%	2.74%	4.36%
Impact of moving from notional gearing	1.34%		1.62%	-
Variance in corporation tax	1.38%	1.38%	0.57%	0.57%
Group relief	-	-	-	-
Cost of debt	0.81%	1.65%	0.44%	0.68%
Hedging instruments	(3.18%)	(3.18%)	(1.73%)	(1.73%)
Other operating expenditure	0.34%	(0.16%)	3.63%	3.88%
Totex out/(under) performance	(0.89%)	(0.89%)	(1.21%)	(1.21%)
ODI out/(under) performance	(0.57%)	(0.57%)	(0.61%)	(0.61%)
C-MeX out/(under) performance	-	-	0.02%	0.02%
D-MeX out/(under) performance	-	-	(0.11%)	(0.11%)
Retail out/(under) performance	(0.84%)	(0.84%)	(0.67%)	(0.67%)
Other exceptional items	0.06%	0.06%	0.04%	0.04%
Operational performance total	(2.23%)	(2.23%)	(2.54%)	(2.54%)
RoRE (return on regulatory equity)	1.14%	1.98%	1.10%	1.34%

Table 2:

Price review

and other

segmental

reporting

Introduction

The information in this section details 'Price review and other segmental reporting' as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables.

Pro forma 2A	Segmental income statement for the 12 months ended 31 March 2022
Pro forma 2B	Totex analysis for the 12 months ended 31 March 2022 – wholesale
Pro forma 2C	Operating cost analysis for the 12 months ended 31 March 2022 – retail
Pro forma 2D	Historic cost analysis of tangible fixed assets
Pro forma 2E	Analysis of 'grants and contributions' for the 12 months ended 31 March 2022 – water resources, water Network+ and wastewater Network+
Pro forma 2F	Residential retail
Pro forma 2I	Revenue analysis for the 12 months ended 31 March 2022
Pro forma 2J	Infrastructure network reinforcement costs for the 12 months ended 31 March 2022
Pro forma 2K	Infrastructure charges reconciliation for the 12 months ended 31 March 2022
Pro forma 2L	Analysis of land sales for the 12 months ended 31 March 2022
Pro forma 2M	Revenue reconciliation for the 12 months ended 31 March 2022 – wholesale
Pro forma 2N	Residential retail – social tariffs
Pro forma 2O	Historic cost analysis of intangible fixed assets

Table 2A**Segmental income statement for the 12 months ended 31 March 2022**

Line description	Units	DPS	Residential retail	Business retail	Water re-sources	Water Network+	Waste-water Network+	Biore-sources	Additional Control	Total	RAG 4 reference
Revenue – price control	£m	3	66.384	0.752	70.093	395.065	505.072	78.592	0.000	1,115.958	2A.1
Revenue – non price control	£m	3	0.000	0.000	0.238	0.926	0.041	0.000	0.000	1.205	2A.2
Operating expenditure – excluding PU recharge impact	£m	3	-80.492	-0.441	-31.195	-228.220	-184.323	-28.443	0.000	-553.114	2A.3
PU Opex recharge	£m	3	-2.881	0.000	0.000	0.000	0.000	0.000	0.000	-2.881	2A.4
Operating expenditure – including PU recharge impact	£m	3	-83.373	-0.441	-31.195	-228.220	-184.323	-28.443	0.000	-555.995	2A.5
Depreciation – tangible fixed assets	£m	3	-4.679	0.000	-7.559	-114.384	-152.324	-22.462	0.000	-301.408	2A.6
Amortisation – intangible fixed assets	£m	3	-1.692	0.000	-0.468	-8.481	-15.347	-0.942	0.000	-26.930	2A.7
Other operating income	£m	3	0.000	2.057	0.259	4.166	5.823	0.000	0.000	12.305	2A.8
Operating profit	£m	3	-23.360	2.368	31.368	49.072	158.942	26.745	0.000	245.135	2A.9
Surface water drainage rebates											
Surface water drainage rebates	£m	3								0.276	2A.10

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Segmental income statement

Table 2A is a summary table showing retail and wholesale revenue and expenditure, including any recharges associated with principle use of assets. Further information can be found in the tables and commentary below.

Principal use recharge

We have followed the same principles as in 2020/2021 in relation to principal use recharge.

Assets have been allocated to price controls in line with the principal use rules in RAG 2 and RAG 4. Where assets are used by more than one price control, they have been allocated to the most relevant price control. In particular, assets used by all price controls within the wholesale and retail businesses such as information technology, general offices, stores/depots, are allocated to wastewater Network+ in [Table 2D](#) and [2O](#) with the depreciation or amortisation recharged across price controls using Full Time Equivalent (FTE) headcount. This is aligned with the approach in previous years.

In 2020/2021 the principal use recharge impact for wholesale was presented within depreciation and amortisation in [Table 2A](#). We have continued with this approach in 2021/2022 and the principal use recharge impact is included within the relevant lines in [Table 2D](#) and [2O](#).

Further information can be found in our Accounting Separation Methodology statement, which can be viewed on our reports webpage here:

Other operating income

Other operating income includes £3.0m of exceptional insurance income received in relation to extreme weather events and £2.0m income relating to deferred consideration on the sale of the non-household retail customer business in the year ended 31 March 2020.

Surface water drainage rebates

Surface water drainage rebates (£0.3m) are largely in line with 2020/2021.

Technical notes

As per the information notice (IN22/01) the provision in relation to the innovation fund in 2021/2022 has been reversed with no corresponding adjustment to revenue. The accrual that was reported in 2020/2021 has also been reversed, with a corresponding adjustment to the regulatory profit and loss account reserves at 31 March 2021.

An accounting policy note for price control units

The Annual Performance Report (APR) tables that contain the regulatory accounts have been prepared in accordance with FRS102, except where Ofwat requires a deviation as per RAG 1.09 – Principles and guidelines for regulatory reporting under the ‘new UK GAAP’ regime. Details of all significant accounting policies are detailed with Yorkshire Water’s Annual Report and Financial Statements which can be found on our reports webpage here:

The regulatory accounts have been prepared in accordance with RAG2 – Guideline for classification of costs across the price controls. This is to ensure the costs that are reported by the price control segments are consistent, non-discriminatory and transparent.

Our Accounting Separation Methodology Statement explains the following:

- The methodology to meet the requirements of RAG2 (Guideline for classification of costs across the price controls).
- The governance in place over the process.
- A summary for the basis of the allocation of operating costs and assets.
- Any major changes in the year.

Our Accounting Separation Methodology Statement can be found on our reports webpage here:

Note on revenue recognition

The difference between statutory and regulatory policy on revenue recognition is explained in [Section 4](#) of this APR within [Table 1](#) commentary.

Yorkshire Water Charges Scheme permits that all connected household properties (water, sewerage or both) are chargeable and the occupier is responsible for paying the bill. The occupier is defined more widely than physical occupation and includes those persons exercising control over premises (e.g. the legal owner or leaseholder). Where an 'occupier' for a property cannot be identified, no charges will be raised. Therefore, there is no turnover recognised for unoccupied properties. Yorkshire Water endeavours to trace the occupiers of properties in order to raise charges that are payable. Charges may be cancelled, or not raised in the first place, where a customer's circumstances indicate this is appropriate, see below.

Water and sewerage charges fall into the following three categories:

Category Business Rule applied

Charges payable in full

- All household (domestic) properties connected for water or waste services or both.
- This includes second homes, holiday homes and properties under renovation.

Charges payable in part

- Metered standing charges, payable on metered properties which are still connected.
- Sewerage unmetered tariff, payable on unmetered, occupied properties where the water supply is disconnected but sewerage connection is still provided.
- Surface water and highway drainage, payable on occupied properties where the water supply is disconnected.

Chargeable but not billed because the occupier cannot be identified (void properties)

No turnover is recognised in respect of properties which are empty and the owner/occupier cannot be identified. Speculative billing in the name of the 'occupier' is not followed. Where the occupier of a property has been identified, charges may not be raised where:

- The occupier/previous occupier is deceased (and there is no executor).
- The company has been informed that the sole occupier has left the property and it is not expected to be reoccupied immediately (e.g. the customer is in a care home, long-term hospitalisation, in prison, temporarily relocated due to a flood).
- The property has been repossessed or subject to a bankruptcy order.

Voids Management Process

Yorkshire Water has a robust process to determine whether a property is occupied and therefore whether charges are due. The occupier is any person who exercises control over a property and is under a duty of care in respect of visitors. The void property management process is followed to identify whether the property occupier can be identified and charged. Yorkshire Water adopts a risk-based approach to its void property management to ensure the process is cost effective, whilst maintaining a fair billing position with regards to customers individual circumstances. The property management process, therefore, uses several different tools to manage empty properties including customer telephone contact, mailings, meter readings, residency checks using credit reference agencies and physical inspections. If the property management process cannot identify an occupier to be charged, the property will remain unoccupied in our billing file and the property will be counted in our Void Property numbers.

New properties

All new properties are metered. Charges accrue from the date at which the meter is installed.

The developer is billed between the date of connection and first occupancy and this is recognised as turnover. If the developer is no longer responsible for the property and no new occupier has been identified, the property management process referred to above is followed to identify the new occupier. Until the new occupier has been identified the property is treated as unoccupied and is not billed.

Measured Accrual

Measured income of £672.0m (2020/2021: £659.7m) has been billed (in arrears) to customers in the year.

The measured income accrual of £77.7m (2020/2021: £72.2m) is an estimation of the amount of water and wastewater charges unbilled at the year end. Key points to consider around this accrual are as follows:

- The accrual calculation is system generated based algorithms. The system methodology uses historical water consumption and tariff data at a customer account level. For high billing value accounts, additional manual adjustments are made where the latest customer intelligence and billing data varies from the system generated calculations.
- Each year following the year end, a review of the actual amount billed against the accrual is conducted to examine the accuracy of the measured accrual. For 2020/2021 the review indicated an underestimation of the measured accrual of £0.5m (2019/2020 £4.1m underestimation).

A consistent approach has been taken in this area.

Table 2B**Totex analysis for the 12 months ended 31 March 2022 – wholesale**

Line description	Units	DPs	Water resources	Water Network+	Waste-water Network+	Biore-sources	Additional Control	Total	RAG 4 reference
Base operating expenditure									
Power	£m	3	3.169	34.501	42.738	-5.458	0.000	74.950	2B.1
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	-2.426	0.000	-2.426	2B.2
Service charges/discharge consents	£m	3	5.520	0.250	6.147	0.028	0.000	11.945	2B.3
Bulk Supply/Bulk discharge	£m	3	3.979	0.004	0.000	0.000	0.000	3.983	2B.4
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	2B.5
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	2B.6
Other operating expenditure (including Location specific costs & obligations)	£m	3	10.559	158.585	118.350	34.860	0.000	322.354	2B.7
Local authority and Cumulo rates	£m	3	7.968	33.432	17.007	1.439	0.000	59.846	2B.8
Total base operating expenditure	£m	3	31.195	226.772	184.242	28.443	0.000	470.652	2B.9
Other operating expenditure									
Enhancement operating expenditure	£m	3	0.000	0.000	0.081	0.000	0.000	0.081	2B.10
Developer services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	2B.11
Total operating expenditure excluding Third Party Services	£m	3	31.195	226.772	184.323	28.443	0.000	470.733	2B.12
Third Party Services	£m	3	0.000	1.448	0.000	0.000	0.000	1.448	2B.13
Total operating expenditure	£m	3	31.195	228.220	184.323	28.443	0.000	472.181	2B.14
Grants and contributions									
Grants and contributions – operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	2B.15

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Table 2B – Continued

Totex analysis for the 12 months ended 31 March 2022 – wholesale

Line description	Units	DPs	Water resources	Water Network+	Waste-water Network+	Biore-sources	Additional Control	Total	RAG 4 reference
Capital expenditure									
Base capital expenditure	£m	3	18.355	112.338	166.624	15.158	0.000	312.475	2B.16
Enhancement capital expenditure	£m	3	4.681	25.783	59.198	1.283	0.000	90.945	2B.17
Developer services capital expenditure	£m	3	0.000	21.790	4.905	0.000	0.000	26.695	2B.18
Total gross capital expenditure excluding Third Party Services	£m	3	23.036	159.911	230.727	16.441	0.000	430.115	2B.19
Third Party Services	£m	3	0.000	2.056	7.357	0.000	0.000	9.413	2B.20
Total gross capital expenditure	£m	3	23.036	161.967	238.084	16.441	0.000	439.528	2B.21
Grants and contributions									
Grants and contributions – capital expenditure	£m	3	0.000	19.423	15.929	0.000	0.000	35.352	2B.22
Net totex	£m	3	54.231	370.764	406.478	44.884	0.000	876.357	2B.23
Cash expenditure									
Pension deficit recovery payments	£m	3	0.321	5.414	5.819	0.796	0.000	12.350	2B.24
Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	2B.25
Totex including cash items	£m	3	54.552	376.178	412.297	45.680	0.000	888.707	2B.26

Totex analysis – wholesale

This table breaks down wholesale totex expenditure into the price controls in accordance with the regulatory accounting guidelines specified by Ofwat. This is an aggregation of the information held in [Tables 4D](#) and [4E](#) (these tables are supported by specific commentary for both Opex and Capex).

Capital expenditure

The total gross regulated capital expenditure associated with the delivery of the wholesale programme in the current reporting year was £439.5m against a Final Determination (FD) of £608.8m. Included within this gross expenditure is a total of £4.6m which we have classified as Atypical expenditure associated with additional costs incurred due to COVID-19 and Flood Recovery.

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A total of £2.4m of these additional costs are associated with continued COVID-19 support. £0.3m related to an ongoing IT project and £2.1m related to testing at some of our wastewater sites, this has been offset by an income of £1.5m.

There is also a further £2.1m of costs which was required to repair or replace our wastewater and water assets, damaged during the extreme flooding events we experienced at the end of the last AMP period.

Expenditure within the year relating to our Management & General (M&G) programme totals £52.6m. Where possible any support costs that are directly attributable to a specific price control are directly allocated (£26.0m) with only general cross business management and general costs (£26.6m) apportioned across the price controls and accounting separation categories by the full time equivalent (FTE) allocation supporting each area as in previous years' reporting.

Throughout this document when we refer to the base Final Determination values for comparison, this also includes Developer Services expenditure.

Gross base capital expenditure of £339.2m, including £26.7m developer services, is above the Final Determination of £329.8m with this investment supporting service improvements required to meet our performance commitment targets.

The total Enhancement capital expenditure in report year totalling £90.9m is significantly below the Final Determination of £279.0m. The delay on spend in year 2 continues from year 1 as we drive the efficiencies that are required to deliver the WINEP and DWI quality programmes within the Final Determination funding, further work in ongoing, by our Strategic Planning Partner Stantec, to ensure that the best overall Totex solutions are promoted. Despite the delay we are confident that no regulatory compliance dates have been put at risk, as we are forecasting to meet corresponding regulatory dates.

In 2021/2022 Third Party Services expenditure totalling £9.4m associated with Main and Sewer diversions have been incurred. Within the report year there are Third Party Services expenditure which are NRSWA requests where a proportion of the income is received that offsets against the total scheme delivery cost. These costs are also reported in [Table 4P](#) and identified as non-price control diversion and as such not included in [Table 4N.7](#).

Further detailed information on the expenditure reported in the current report year for each service area and price control can be found in the commentary for [Tables 2J, 4D, 4E, 4J, 4K, 4L, 4M, 4N, 4O & 4P](#).

Further detailed information on the expenditure reported in the current report year for each service area and price control can be found in the commentary for [Tables 4N & 4O](#).

Income totalling £35.4m has been received in the current report year through grants and contributions against a Final Determination of £20.0m.

Further detailed information on the income received through grants and contributions in the current report year for each service area and price control can be found in the commentary for [Table 2E](#).

Operating expenditure

More information on year on year variances can be found in our Accounting Separation Methodology statement, which can be viewed on our reports webpage here:

Summary

Underlying operational performance has been strong in 2021/2022 as we set ourselves stretching operational targets across a number of performance commitments in AMP6. To meet these targets, we made improvements to the operational business to prepare ourselves for AMP7. Our overall base operating costs have decreased in 2021/2022 for the following reasons:

- COVID-19 impacted our business during 2020/2021 which led to increased costs in that year due to:
 - Enhanced cleaning regimes;
 - Social distancing requirements requiring additional vehicles;
 - Protective equipment to keep our colleagues safe;
- Payments to key delivery partners to employ personnel who were considered critical responders in the event of operational emergencies in the business, such as leakage incidents; and
- Engagement with third party contractors to ensure essential services are delivered whilst our colleagues shield or isolate.

With COVID-19 restrictions easing during this year, we have seen a decrease in such costs. We have continued to carefully monitor the impact of COVID-19 and maintained safe operations as our colleagues returned to work.

- In 2020/2021 we incurred one-off costs in relation to legal and advisory costs for the referral of the AMP7 Final Determination (FD) to the Competition and Markets Authority (CMA). The majority of these costs were allocated to water.
- The severe winter in 2020/2021 along with very heavy rainfall from November 2020 through to February 2021 led to high repair and maintenance (R&M) costs and an increase in electricity usage and localised flooding. We have seen a more benign winter and the storms during 2021/2022 led to wind damage and power cuts (see below).
- Despite these decreases and tightly managing our operating budget, there have been a number of inflationary cost pressures:
 - Energy prices – unhedged energy costs are exposed to the day ahead energy market, which has been volatile in 2021/2022. We are managing the risk of energy prices by fixing contract prices where possible and operating within an energy purchasing policy that is designed to manage price volatility risk. As at 31 March 2022, Yorkshire Water had fixed over 70% of its wholesale energy costs for AMP7, including 100% for the 2022/2023 financial year, through a combination of forward contracts and energy swap transactions.
 - Chemical costs – as a result of increased fuel, energy and raw material prices we have seen market pressures in the chemical supply chain. This has resulted in a surcharge from suppliers being passed onto us, predominantly impacting the cost of water treatment.
- There have been a number of significant storms in 2021/2022, from Storm Arwen in November 2021 to storms Dudley, Eunice and Franklin in February 2022. Storm Arwen severely impacted Northern Powergrid with over 240,000 customers without power. The power loss directly impacted our assets and led to a loss of supply for some of our customers. We had a great response from our operational team to minimise the impact.

- We continue to incur costs in relation to the transformation programme we commenced last year across the business, which has identified efficiencies and will allow us to make a step change in operational performance over AMP7 to meet our stretching FD. This transformation programme includes a right-sizing in some areas resulting in associated severance costs.
- A realignment of terms and conditions, and inflationary pressure has resulted in increased staff costs.

Further explanation of significant base operating expenditure movements for each of the four price controls (water resources, water networks plus, wastewater Network+ and bioresources) are detailed below, together with technical notes.

We have incurred £nil enhancement operating expenditure for the water price control and minimal enhancement operating expenditure for wastewater. We expect these costs to increase as we progress through AMP7.

Water Resources

The year on year increase in water resources of £1.2m (4.0%) is primarily due to an increase hired and contracted (H&C) costs as a result of periodic inspection and maintenance of our reservoirs. A realignment of terms and conditions has led to increased staff costs.

Water Network+

There have been several major storms in 2021/2022, and Storm Arwen in November 2021 had a significant impact on the water price control. The storm led to severe disruption to Northern Powergrid and resulted in a loss of power impacting 31 of our water treatment works and 12 water pumping stations. Whilst we largely mitigated any impact on our customers, some customers did experience a loss of supply.

There has been a significant increase in costs for the water treatment upstream service due to increasing market pressures in the chemical supply chain. Chemical prices have increased significantly to cover soaring energy, fuel and raw material prices. This surcharge has been passed on to us from the suppliers.

Energy consumption has stayed relatively stable, but we are seeing a slight impact of population growth this year with a step up in volumes treated to meet distribution requirements. Unhedged energy costs have been exposed to the volatile market prices.

A realignment of terms and conditions as well as inflationary pressures has resulted in increased staff costs.

Despite all these pressures the price control saw a decrease in costs by £3.2m (1.4%) due to:

- In 2020/2021 water Network+ saw an increase in operating costs due to the CMA referral and COVID-19 operational costs mentioned above, as well as payments made to key delivery partners to employ personnel who were considered critical responders in the event of operational emergencies in the business such as leakage incidents. However, in 2021/2022 these events are no longer impacting our operating costs.
- 2021/2022 also experienced a milder summer with no surge in demand as experienced in the previous year. A more benign winter also led to a decrease in network repair and maintenance costs.

The water price control continues to incur costs in relation to the transformation programme as mentioned above.

Wastewater Network+

Overall wastewater Network+ saw an increase in costs of £4.9m (2.7%) compared to 2020/2021.

Sewage collection

Increased investment to improve performance in readiness for enhanced AMP7 regulatory targets including sewer rehabilitation, reducing the chance of repeat incidents by minimising any backlog of jobs, and more focused proactive investigation and repairs to the sewer network, has meant we have seen a decrease in operating costs for sewage collection.

There has also been a decrease in operating costs compared to last year as we drive to improve 'first time fixes'.

Last year COVID-19 had a significant impact on operating costs for sewage collection which included costs incurred for working with third party contractors to ensure essential services were delivered. However, in 2021/2022 these costs are no longer impacting this upstream service.

Sewage treatment

There has been an increase in operating costs for the sewage treatment upstream service, predominantly due to increased energy costs. Even though energy consumption has decreased as a result of reduction in flows treated compared to last year, unhedged energy costs have been impacted by the volatile market prices.

There have been several significant storms in 2021/2022 from Storm Arwen in November 2021 to storms Dudley, Eunice and Franklin in February 2022. The impact of these storms has not been as severe as those in 2020/2021. The main impact was damage to our assets from the strong winds. We had a great response from our operational teams in terms of planning ahead and dealing with localised flooding which impacted our assets.

A realignment of terms and conditions as well as inflationary pressures has resulted in increased staff costs.

Chemical prices have increased significantly to cover increasing energy, fuel and raw material prices. This surcharge has been passed on from our suppliers and has impacted the costs of our sewage treatment process. In 2021/2022 the impact of chemical prices is greater on the water price control. However, we are experiencing these pressures increasing in 2022/2023 for wastewater in both the sewage and sludge treatment process.

Strong treatment works compliance has continued in 2021/2022 for sewage treatment upstream service, keeping associated costs related to 'at risk' and 'high risk' works to a minimum.

Bioresources

Year on year there has been a decrease in operating costs for the bioresources price control of £6.7m (19.1%), primarily as a result of improved generation performance due to sites such as Esholt, Dewsbury and Huddersfield coming online resulting in less energy purchased.

A realignment of terms and conditions as well as inflationary pressures has resulted in increased staff costs.

There has been an increase in hired and contracted (H&C) costs for sludge transport due to the full year impact of outsourcing the sludge transport function to a contractor. Whilst this is more efficient on a totex basis, as a result of no longer needing to replace the ageing sludge tankers which would have required significant capital expenditure, the new arrangement does result in all costs being incurred in the P&L, so increasing operating costs.

The waste price control continues to incur costs in relation to the transformation programme as mentioned above.

Technical notes

As per the information notice (IN22/01) the provision in relation to the innovation fund in 2021/2022 has been reversed with no corresponding adjustment to revenue. The accrual that was reported in 2020/2021 has also been reversed, with a corresponding adjustment to the regulatory profit and loss account reserves at 31 March 2021.

Pensions costs continue to be presented in cash expenditure (£12.4m) rather than operating expenditure for the wholesale business. In relation to pension costs, RAG 4.10 states 'Companies that report under FRS102 should include the element of the statutory charge attributable to deficit payments in this line'. In line with this guidance, pension costs for 2021/2022 are included in cash expenditure. This ensures comparability with the treatment of financial tables Ofwat required as part of the most recent Price Review and ensures comparability with the treatment applied by most of the water and sewerage companies who adopt different statutory accounting standards for pensions. This treatment is because Yorkshire Water's defined benefit scheme is accounted for under the FRS102 accounting standard which applies the same rules as a defined contribution scheme.

Note on capitalisation policy

Costs are capitalised following the company's capitalisation policy which states that capital expenditure includes:

- Acquisition of land and buildings.
- Expenditure of more than £3,000 on the construction, provision, purchase, replacement or improvement of other fixed assets or their major renewal. Where individual items each costing less than £3,000 are part of an approved project falling within this definition then the whole of the expenditure is to be capitalised, e.g. Initial furniture and equipment for newly constructed premises.
- Salaries, salaries on cost and associated costs of staff employed on capital works.

The cost of a tangible fixed asset comprises its purchase price and any costs directly attributable to bringing it into working condition for its intended use. Any other costs are treated as operating expenditure.

Directly attributable costs are:

- The labour costs of Group employees arising directly from construction or acquisition of the tangible fixed asset.
- The incremental costs to the Group that would have been avoided only if the tangible fixed asset had not been constructed or acquired.

Administration and other general overhead costs are excluded from the cost of a tangible fixed asset.



Table 2C**Cost analysis for the 12 months ended 31 March 2022 – retail**

Line description	Units	DPs	Residential	Business	Total	RAG 4 reference
Operating expenditure						
Customer services	£m	3	31.271	0.000	31.271	2C.1
Debt management	£m	3	3.927	0.000	3.927	2C.2
Doubtful debts	£m	3	34.887	0.000	34.887	2C.3
Meter reading	£m	3	1.222	0.000	1.222	2C.4
Services to developers	£m	3		0.396	0.396	2C.5
Other operating expenditure	£m	3	7.617	0.000	7.617	2C.6
Local authority and Cumulo rates	£m	3	0.089	0.003	0.092	2C.7
Total operating expenditure excluding Third Party Services	£m	3	79.013	0.399	79.412	2C.8
Depreciation						
Depreciation (tangible fixed assets) on assets existing at 31 March 2015	£m	3	0.520	0.000	0.520	2C.9
Depreciation (tangible fixed assets) on assets acquired after 1 April 2015	£m	3	4.159	0.000	4.159	2C.10
Amortisation (intangible fixed assets) on assets existing at 31 March 2015	£m	3	0.000	0.000	0.000	2C.11
Amortisation (intangible fixed assets) on assets acquired after 1 April 2015	£m	3	1.692	0.000	1.692	2C.12
Recharges						
Recharge from wholesale for legacy assets principally used by wholesale (assets existing at 31 March 2015)	£m	3	0.081	0.000	0.081	2C.13
Income from wholesale for legacy assets principally used by retail (assets existing at 31 March 2015)	£m	3	0.000	0.000	0.000	2C.14
Recharge from wholesale assets acquired after 1 April 2015 principally used by wholesale	£m	3	2.800	0.000	2.800	2C.15
Income from wholesale assets acquired after 1 April 2015 principally used by retail	£m	3	0.000	0.000	0.000	2C.16
Net recharges costs	£m	3	2.881	0.000	2.881	2C.17
Total retail costs excluding third party and pension deficit repair costs	£m	3	88.265	0.399	88.664	2C.18
Third Party Services operating expenditure	£m	3	0.000	0.000	0.000	2C.19
Pension deficit repair costs	£m	3	1.479	0.042	1.521	2C.20
Total retail costs including third party and pension deficit repair costs	£m	3	89.744	0.441	90.185	2C.21
Debt written off						
Debt written off	£m	3	22.649	0.000	22.649	2C.22
Capital expenditure						
Capital expenditure	£m	3	8.147	0.000	8.147	2C.23

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 2C – Continued

Cost analysis for the 12 months ended 31 March 2022 – retail

Line description	Units	DPs	Residential	RAG 4 reference
Other operating expenditure includes the net retail expenditure for the following household retail activities which are part funded by wholesale				
Demand-side water efficiency – gross expenditure	£m	3	0.350	2C.24
Demand-side water efficiency – expenditure funded by wholesale	£m	3	0.350	2C.25
Demand-side water efficiency – net retail expenditure	£m	3	0.000	2C.26
Customer-side leak repairs – gross expenditure	£m	3	4.954	2C.27
Customer-side leak repairs – expenditure funded by wholesale	£m	3	4.952	2C.28
Customer-side leak repairs – net retail expenditure	£m	3	0.002	2C.29
Comparison of actual and allowed expenditure				
Cumulative actual retail expenditure to reporting year end	£m	3	165.430	2C.30
Cumulative allowed expenditure to reporting year end	£m	3	126.151	2C.31
Total allowed expenditure 2020–25	£m	3	320.927	2C.32

Operating cost analysis – retail

Table 2C further breaks down the retail operating costs included in [Table 2A](#) into cost categories.

Household retail operating costs

Compared to 2020/2021, household (HH) retail operating costs including third party services and pension deficit repair costs have increased by £10.0m to £80.5m in 2021/2022. The reasons for the variance are:

- Increase in bad debt provisions reflecting the cost of living crisis impacting vulnerable customers in 2022/2023 and future years. A high level of uncertainty remains around how current economic conditions could impact the recoverability of household debtors, particularly in light of the backdrop of COVID-19, rising energy prices, and high inflation rates which have adversely impacted typical household's disposable income affecting some customers' ability to pay.
- Household write offs have also increased in the year. This is partly due to an increase in 'legal' related write offs such as bankruptcy, liquidation and statute write offs. There has also been an increase in customers needing support in the year, which we have seen through our 'Resolve' support scheme and an increased level of customers applying for debt relief orders.
- There has been an increase in staff costs partly due to the growth of the operational customer services team, which includes the full year impact of insourcing from Loop. In addition, there has been a realignment of terms and conditions and inflationary pressure resulting in increased staff costs.
- The above in part has led to an increase in overhead costs where headcount is used as a cost driver.
- Included within retail operating costs is £1.1m of exceptional costs in relation to the transformation programme commenced last year across the business, which has identified efficiencies and will allow us to make a step change in operational performance over the AMP to meet our stretching FD. This transformation programme includes a right-sizing in some areas resulting in associated severance costs.

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Non-household retail operating costs

The non-household (NHH) part of the business was disposed of during 2019/2020. There has been an increase of £0.5m to £0.4m in 2021/2022 and the price control continues to incur operational costs in the following areas:

- Doubtful debt costs are £nil (2022/2021 £0.6m credit). The 2020/2021 credit reflected a re-assessment of the non-household retail bad debt provision in the year by Yorkshire Water Business Services (YWBS) following the sale of the non-household customer book in 2019/2020.
- Developer services costs have decreased, the majority of which are attributable to a decrease in General and Support (G&S) costs following a review of allocations since the exit from the non-household market.

Technical notes

Pension costs for retail (£1.5m) have been presented within operating expenditure. This is consistent with the submission of these costs within the retail tables for PR19. This treatment is because Yorkshire Water's defined benefit scheme is accounted for under the FRS102 accounting standard which applies the same rules as a defined contribution scheme.

Note on bad debt policy

Debt is only written off after all available economic options for collecting the debt have been exhausted and the debt has been deemed to be uncollectable.

This may be because the debt is considered to be impossible, impractical, inefficient or uneconomic to collect. Debt may also be written off as part of the customer help schemes that Yorkshire Water offer.

Situations where this may arise and where debt may be written off are as follows:

- Where the customer has absconded without paying and strategies to trace their whereabouts and collect outstanding monies have been fully exhausted.
- Where the customer has died without leaving an estate or has left an insufficient estate on which to levy execution.
- Where the customer does not have any assets/has insufficient assets on which to levy execution.
- Where the age and/or value of the debt makes it uneconomic to pursue – all debts of less than £65 are written off.
- Where county court proceedings and attempts to recover the debt by debt collection agencies have proved unsuccessful.
- Where the customer has been declared bankrupt, is in liquidation or is subject to insolvency proceedings or a debt relief order and no dividend has been or is likely to be received.

Bad and doubtful debts provisions policy

The bad debt provision is charged to operating costs to reflect the company's assessment of the risk of non-recoverability of debtors. It is calculated by applying expected residual debt rates to debts outstanding at the end of the accounting period.

These rates consider the age of the debt, write offs, payment history and type of debt.

The provision is built on a 'by customer' basis ageing all debt by customer against the oldest invoice date. It is calculated by applying expected residual debt rates to arrears outstanding at the end of the accounting period. The residual debt values are tracked over a period of 2 years and these rates are then applied to the debts outstanding at the end of the accounting period aged on a 'by customer' basis. The remaining debt values are then fully provided for.

The bad and doubtful debts provisioning policy is applied to both unmeasured and measured accounts.

A provision of £65.1m is held at 31 March 2022 (31 March 2021: £52.8m). The main elements of the provision are as follows:

- £37.5m unmeasured household debtor provision (direct billing). Calculated using information based on the age of debts.
- £23.1m measured household debtor provision. Calculated using information based on the age of debts.
- £3.0m unbilled household measured accounts provision.
- There has been an increase in the household element of the bad debt provision in the year. The main driver for this increase is to reflect the cost-of-living crisis impacting vulnerable customers. This includes an increase to the energy price cap and the highest rates of inflation seen in the last 30 years, resulting in a significant drop in disposable income for household customers.

As is the case with any accounting estimate, actual amounts recovered may differ from the estimated levels of recovery which would impact on operating results. The Yorkshire Water website contains details of Yorkshire Water's guide to debt recovery services.

Table 2D**Historic cost analysis of tangible fixed assets at 31 March 2022**

Line description	Units	DPS	Residential Retail	Business Retail	Water resources	Water Network+	Wastewater Network+	Bioresources	Additional Control	Total	RAG 4 reference
Cost											
At 1 April 2021	£m	3	45.037	0.000	375.135	4,835.321	5,555.925	588.851	0.000	11,400.269	2D.1
Disposals	£m	3	-8.771	0.000	-7.517	-62.096	-102.103	-21.871	0.000	-202.358	2D.2
Additions	£m	3	-0.635	0.000	23.747	139.312	242.026	7.706	0.000	412.156	2D.3
Adjustments	£m	3	0.000	0.000	50.970	299.056	546.311	0.000	0.000	896.337	2D.4
Assets adopted at nil cost	£m	3	0.000	0.000	0.000	0.000	15.006	0.000	0.000	15.006	2D.5
At 31 March 2022	£m	3	35.631	0.000	442.335	5,211.593	6,257.165	574.686	0.000	12,521.410	2D.6
Depreciation											
At 1 April 2021	£m	3	-32.433	0.000	-64.549	-1,682.759	-1,366.515	-184.577	0.000	-3,330.833	2D.7
Disposals	£m	3	8.766	0.000	7.514	62.074	102.070	21.869	0.000	202.293	2D.8
Adjustments	£m	3	0.000	0.000	0.511	10.854	-14.432	1.640	0.000	-1.427	2D.9
Charge for year	£m	3	-4.679	0.000	-7.559	-114.384	-152.324	-22.462	0.000	-301.408	2D.10
At 31 March 2022	£m	3	-28.346	0.000	-64.083	-1,724.215	-1,431.201	-183.530	0.000	-3,431.375	2D.11
Net book amount at 31 March 2022	£m	3	7.285	0.000	378.252	3,487.378	4,825.964	391.156	0.000	9,090.035	2D.12
Net book amount at 1 April 2021	£m	3	12.604	0.000	310.586	3,152.562	4,189.410	404.274	0.000	8,069.436	2D.13
Depreciation charge for year											
Principal services	£m	3	-4.679	0.000	-7.559	-114.385	-152.324	-22.462	0.000	-301.409	2D.14
Third Party Services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2D.15
Total	£m	3	-4.679	0.000	-7.559	-114.385	-152.324	-22.462	0.000	-301.409	2D.16

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Table 2D analyses changes in the fixed assets of both wholesale and retail activities of Yorkshire Water.

Our accounting policies in relation to fixed assets and depreciation are set out in full in note 1 of the statutory Annual Report and Financial Statements which can be found on our reports page here:

The table above details that the net book value of fixed assets at 31 March 2022 amounts to £9,090.0m, an increase of £1,020.6m since the start of the year. This movement includes:

- Fixed asset additions during the year of £412.2m, which is broadly in line with 2020/2021 (£424.9m).
- Adjustments include an upward valuation of £901.8m to infrastructure assets, along with a reclassification of prior year asset values to intangibles of £5.4m.
- Assets adopted at nil cost are valued at £15.0m, which is broadly in line with 2020/2021 (£14.6m).
- The depreciation charge for the year is £301.4m. This is higher than the previous year due to increased accelerated depreciation of assets being replaced.
- Disposals in the year total £0.1m, largely of assets with zero net book value and £0.1m of expired leases under accounting standard IFRS16.

Technical notes

As noted in [Table 1C](#), Yorkshire Water elects under FRS102 to hold infrastructure and land/property assets at valuation rather than historic cost. Due to an upward revaluation of £901.8m, there is an increase in 2021/2022 in [Table 2D](#).

RAG 1.09 requires all companies to account for leases in accordance with IFRS 16. This has resulted in Yorkshire Water recognising right of use assets within fixed assets and an additional depreciation charge on the right of use assets.

Included within depreciation and depreciation adjustments is the principal use recharge impact which in 2020/2021 was within depreciation and amortisation in [Table 2A](#). This approach has been consistently applied.

Table 2E

Analysis of 'grants and contributions' for the 12 months ended 31 March 2022 – water resources, water Network+ and wastewater Network+

Line description	Units	DPs	Fully recognised in income statement	Capitalised and amortised (in income statement)	Fully netted off Capex	Total	RAG 4 reference
Grants and contributions – water resources							
Diversions – s185	£m	3	0.000	0.000	0.000	0.000	2E.1
Other contributions (price control)	£m	3	0.000	0.000	0.000	0.000	2E.2
Price control grants and contributions	£m	3	0.000	0.000	0.000	0.000	2E.3
Diversions – NRSWA	£m	3	0.000	0.000	0.000	0.000	2E.4
Diversions – other non-price control	£m	3	0.000	0.000	0.000	0.000	2E.5
Other contributions (non-price control)	£m	3	0.000	0.000	0.000	0.000	2E.6
Total grants and contributions	£m	3	0.000	0.000	0.000	0.000	2E.7
Value of adopted assets	£m	3	0.000	0.000		0.000	2E.8
Grants and contributions – water Network+							
Connection charges	£m	3	0.000	7.213	0.000	7.213	2E.9
Infrastructure charge receipts – new connections	£m	3	0.000	4.802	0.000	4.802	2E.10
Requisitioned mains	£m	3	0.000	6.189	0.000	6.189	2E.11
Diversions – s185	£m	3	0.000	0.340	0.000	0.340	2E.12
Other contributions (price control)	£m	3	0.000	0.000	0.000	0.000	2E.13
Price control grants and contributions before deduction of income offset	£m	3	0.000	18.544	0.000	18.544	2E.14
Income offset	£m	3	0.000	0.840	0.000	0.840	2E.15
Price control grants and contributions after deduction of income offset	£m	3	0.000	17.704	0.000	17.704	2E.16
Diversions – NRSWA	£m	3	0.000	1.450	0.000	1.450	2E.17
Diversions – other non-price control	£m	3	0.000	0.000	0.000	0.000	2E.18
Other contributions (non-price control)	£m	3	0.000	0.269	0.000	0.269	2E.19
Total grants and contributions	£m	3	0.000	19.423	0.000	19.423	2E.20
Value of adopted assets	£m	3	0.000	0.000		0.000	2E.21

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Table 2E – Continued

Analysis of 'grants and contributions' for the 12 months ended 31 March 2022 – water resources, water Network+ and wastewater Network+

Line description	Units	DPs	Fully recognised in income statement	Capitalised and amortised (in income statement)	Fully netted off Capex	Total	RAG 4 reference
Grants and contributions – wastewater Network+							
Receipts for on-site work	£m	3	0.000	3.083	0.000	3.083	2E.22
Infrastructure charge receipts – new connections	£m	3	0.000	2.715	0.000	2.715	2E.23
Diversions – s185	£m	3	0.000	3.547	0.000	3.547	2E.24
Other contributions (price control)	£m	3	1.718	0.000	0.000	1.718	2E.25
Price control grants and contributions before deduction of income offset	£m	3	1.718	9.345	0.000	11.063	2E.26
Income offset	£m	3	0.000	0.000	0.000	0.000	2E.27
Price control grants and contributions after deduction of income offset	£m	3	1.718	9.345	0.000	11.063	2E.28
Diversions – NRSWA	£m	3	0.000	4.746	0.000	4.746	2E.29
Diversions – other non-price control	£m	3	0.000	0.000	0.000	0.000	2E.30
Other Contributions (non-price control)	£m	3	0.000	1.838	0.000	1.838	2E.31
Total grants and contributions	£m	3	1.718	15.929	0.000	17.647	2E.32
Value of adopted assets	£m	3	0.000	15.006		15.006	2E.33
Line description	Units	DPs	Water resources	Water Network+	Waste-water Network+	Total	RAG 4 reference
Movements in capitalised grants and contributions							
b/f	£m	3	0.000	187.731	294.689	482.420	2E.34
Capitalised in year	£m	3	0.000	19.423	15.929	35.352	2E.35
Amortisation (in income statement)	£m	3	0.000	-5.795	-4.498	-10.293	2E.36
c/f	£m	3	0.000	201.359	306.120	507.479	2E.37

Capital Expenditure

Income totalling £35.4m has been received in the current report year through grants and contributions against a Final Determination (FD) of £20.0m.

Grants and contributions associated with the wholesale water programme in the current report year total £19.4m which is higher than the Final Determination of £11.7m. Further detail of the how this income is split is explained below:

A total of £7.2m has been received from developers for s45 new connections against a FD allowance of £6.6m. Water infrastructure charge receipts totalling £4.8m against a FD allowance of £1.2m. A total of £6.2m of income on requisitioned water mains, in comparison with FD allowance of £1.1m, has been received due to an increase in requests compared to the level of activity used to calculate the FD allowance.

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The remaining income on the water programme relates to income received due to requests to divert our water mains assets which totals £0.3m in the current report year against a FD allowance of £2.8m. There is also a total of £1.5m income associated with diverting our mains as part of a NRSWA (New Roads and Street Works Act 1991) requests for which no capital allowance was made within the FD, with the subsequent expenditure reported in [Table 4P](#) as, per the RAGs, it is considered to be non-price control income.

Detail of the associated expenditure reported in year can be found in the commentary for [Table 4N](#).

Grants and contributions associated with the wholesale wastewater programme in the current report year total £15.9m which is higher than the Final Determination of £8.3m. Further detail of the how this income is split is provided below:

A total of £3.1m is with regards to income on requisitioned sewers in comparison with FD allowance of £1.9m. Wastewater infrastructure charge receipts totalling £2.7m have been received in year which is lower than the FD allowance of £5.3m.

The remaining income on the wastewater programme relates to income received due to requests to divert our sewers which totals £3.5m in the current report year against a FD allowance £1.1m. We have also reported s104 income that we within the fully recognised in income statement category of £1.7m, this did not have a FD allowance.

There is also a total of £4.7m income associated with diverting our sewers as part of NRSWA (New Roads and Street Works Act 1991) no capital allowance was made within the FD, with the subsequent expenditure reported in [Table 4P](#) as, per the RAGs, it is considered to be incurred outside of the price control.

Detail of the associated expenditure reported in year can be found in the commentary for [Table 4O](#).

Table 2F**Residential retail for the 12 months ended 31 March 2022**

Line description	Revenue	Number of customers	Average residential revenues	RAG 4 reference
Units DPs	£m 3	000s 3	£ 3	
Residential revenue				
Wholesale revenue	833.098			2F.1
Retail revenue	66.384			2F.2
Total residential revenue	899.482			2F.3
Retail revenue				
Revenue Recovered ("RR")	66.384			2F.4
Revenue sacrifice	2.000			2F.5
Actual revenue (net)	68.384			2F.6
Customer information				
Actual customers ("AC")		2,252.952		2F.7
Reforecast customers		2,267.952		2F.8
Adjustment				
Allowed revenue ("R")	70.255			2F.9
Net adjustment	1.871			2F.10
Other residential information				
Average household retail revenue per customer			30.353	2F.11

Total household retail revenue received in 2021/2022 was £66.4m, however after adjusting for the £2m revenue sacrifice the recovered retail revenue is £68.4m. This is £1.9m lower than the 'Customer & Markets Authority' (CMA) Final Determination (FD) allowance of £70.3m. The under recovery is, in the main, due to the additional support that has been provided to customers through an increase in customers on the social tariff.

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 21

Revenue analysis for the 12 months ended 31 March 2022

Line description	Units	DPs	Household	Non- household	Total	Water resources	Water Network+	Total	RAG 4 reference
Wholesale charge - water									
Unmeasured	£m	3	182.431	1.073	183.504	30.177	153.327	183.504	21.1
Measured	£m	3	180.727	99.934	280.661	39.916	240.745	280.661	21.2
Third party revenue	£m	3	0.000	0.993	0.993	0.000	0.993	0.993	21.3
Total wholesale water revenue	£m	3	363.158	102.000	465.158	70.093	395.065	465.158	21.4
Line description	Units	DPs	Household	Non- household	Total	Wastewater Network+	Bioresources	Total	
Wholesale charge - wastewater									
Unmeasured - foul charges	£m	3	163.183	1.358	164.541	131.042	33.499	164.541	21.5
Unmeasured - surface water charges	£m	3	41.176	0.820	41.996	40.585	1.411	41.996	21.6
Unmeasured - highway drainage charges	£m	3	16.319	0.146	16.465	15.992	0.473	16.465	21.7
Measured - foul charges	£m	3	188.960	92.455	281.415	240.608	40.807	281.415	21.8
Measured - surface water charges	£m	3	41.704	12.726	54.430	52.503	1.927	54.430	21.9
Measured - highway drainage charges	£m	3	18.598	5.794	24.392	23.917	0.475	24.392	21.10
Third party revenue	£m	3	0.000	0.425	0.425	0.425	0.000	0.425	21.11
Total wholesale wastewater revenue	£m	3	469.940	113.724	583.664	505.072	78.592	583.664	21.12
Wholesale charge - Additional Control									
Unmeasured	£m	3	0.000	0.000	0.000				21.13
Measured	£m	3	0.000	0.000	0.000				21.14
Total wholesale additional control revenue	£m	3	0.000	0.000	0.000				21.15
Wholesale Total	£m	3	833.098	215.724	1,048.822				21.16
Retail revenue									
Unmeasured	£m	3	33.941	0.000	33.941				21.17
Measured	£m	3	32.443	-1.299	31.144				21.18
Retail third party revenue	£m	3	0.000	2.051	2.051				21.19
Total retail revenue	£m	3	66.384	0.752	67.136				21.20

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 2I – Continued

Revenue analysis for the 12 months ended 31 March 2022

Line description	Units	DPs	Household	Non- household	Total	Wastewater Network+	Bioresources	Total	RAG 4 reference
Third party revenue - non-price control									
Bulk supplies - water	£m	3			0.238				2I.21
Bulk supplies - wastewater	£m	3			0.000				2I.22
Other third-party revenue - non price control	£m	3			0.926				2I.23
Principal services - non-price control									
Other appointed revenue	£m	3			0.041				2I.24
Total appointed revenue	£m	3			1,117.163				2I.25

Appointed revenue to has increased from £1,096.9m (2020/2021) to £1,117.2m in 2021/2022.

Total wholesale and retail revenue received from household customers for the year 2021/2022 was £899.5m, compared to £889.9m in 2020/2021, an increase of £9.6m (1.1%). This increase is mainly attributable to allowed inflationary increases, partially offset by 4% decreased consumption due to weather and the COVID-19 lockdown in the comparative year:

- Household unmeasured income increased by £8.1m to £437.1m (2020/2021: £429.0m)
- Household measured income increased by £1.5m to £462.4m (2020/2021: £460.9m)

Total wholesale revenue received from non-household customers increased by £9.3m to £214.3m in 2021/2022 (2020/2021: £205.0m), mainly due to increased consumption:

- Non household wholesale measured income increased by £9.1m to £210.9m (2020/2021: £201.8m)
- Non household wholesale unmeasured income increased by £0.2m to £3.4m (2020/2021: £3.2m).

Total retail non-household revenue includes a £2.5m negative revenue adjustment in relation to the one-off settlement of the income and cash due to Scottish Water Business Stream Limited (SWBS). This is largely offset by £2.0m exceptional income reported in other operating income in [Table 1A](#) relating to the deferred consideration on the sale of the non-household retail customer business to SWBS in the year ended 31 March 2020.

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Table 2J**Infrastructure network reinforcement costs for the 12 months ended 31 March 2022**

Line description	Units	DPs	Network reinforcement Capex	On site/site specific Capex (memo only)	RAG 4 reference
Wholesale water Network+ (treated water distribution)					
Distribution and trunk mains	£m	3	5.635	0.000	2J.1
Pumping and storage facilities	£m	3	0.228	0.000	2J.2
Other	£m	3	0.002	0.000	2J.3
Total	£m	3	5.865	0.000	2J.4
Wholesale wastewater Network+ (sewage collection)					
Foul and combined systems	£m	3	0.093	0.000	2J.5
Surface water only systems	£m	3	0.000	0.000	2J.6
Pumping and storage facilities	£m	3	0.008	0.000	2J.7
Other	£m	3	0.000	0.000	2J.8
Total	£m	3	0.101	0.000	2J.9

Capital Expenditure

Water network reinforcement expenditure totalling £5.9m has been reported in the current report year. This is made up of investment of £5.6m on our distribution and trunk mains network at various sites with mains schemes in the current report year the largest reported cost in the year is £2.0m in New Market Lane, Wakefield and a further £0.2m on pumping and storage facilities.

Wastewater network reinforcement expenditure totalling £0.1m has been reported in the current report year.

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 2K**Infrastructure charges reconciliation for the 12 months ended 31 March 2022**

Line description	Units	DPs	Water	Wastewater	Total	RAG 4 reference
Impact of infrastructure charge discounts						
Infrastructure charges	£m	3	4.802	2.715	7.517	2K.1
Discounts applied to infrastructure charges	£m	3	0.003	0.739	0.742	2K.2
Gross Infrastructure charges	£m	3	4.805	3.454	8.259	2K.3
Comparison of revenue and costs						
Variance brought forward	£m	3	-2.584	6.361	3.777	2K.4
Revenue	£m	3	4.802	2.715	7.517	2K.5
Costs	£m	3	-5.865	-0.101	-5.966	2K.6
Variance carried forward	£m	3	-3.647	8.975	5.328	2K.7

Infrastructure Charges

The total value of our 'Discounts Applied to Infrastructure Charges' for 2021/2022 is made up of two components. The first is the total value of environmental discounts applied to water and foul infrastructure charges based on the value of charge reductions for new developments with water efficient fittings. Our discounts are derived from the industry 'Water Calculator' and based on a reducing multiplier that measure daily forecast water consumption below 125lpppd.

The second component is the total value of Surface Water Drainage (SWD) charges 'not charged' where surface water for new developments is discharged to a watercourse or soak away rather than into the YWS network. These properties are identified from our central billing records where new properties have not been set up without an annual SWD charge.

In the 2021/2022 we have promoted our environmental discounts in our annual charges book and consultations and developers are using more environmental solutions. The value of our total discount (water and waste) has increased from £0.575m (2020/2021) to £0.748m (2021/2022).

Capital Expenditure

As agreed in our proposed developer charging framework, we moved immediately to a suite of fully cost reflective developer charges to only recover costs associated with developer driven network reinforcement activity. It was agreed that until 2023 when a five-year rolling average must be used, we would build our infrastructure charges from 2018 on an incremental basis to reflect any changes to the relating expenditure in comparison to the assumptions in the Final Determination.

The water network reinforcement expenditure of £5.9m within the year and the carried forward variance of £2.6m is compared to the revenue of £4.8m, this leaves a variance of £3.6m. We will continue to review the level of water network reinforcement activity and expenditure and adjust the charge accordingly to ensure that this investment is borne by in full by the developer customers and not general customers as per Defra's guidance.

Our wastewater network reinforcement expenditure of £0.1m is much lower than the forecast activity, this when added to the balance of £6.4m leaves a variance of £9.0m against the £2.7m of revenue. We will continue to review the level of wastewater network reinforcement activity and expenditure and adjust the charge accordingly to ensure that this investment is borne by in full by the developer customers and not general customers as per Defra's guidance.

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Table 2L**Analysis of land sales for the 12 months ended 31 March 2022**

Line description	Units	DPs	Water resources	Water Network+	Wastewater Network+	Additional control	Total	RAG 4 reference
Land sales – proceeds from disposals of protected land	£m	3	0.087	0.011	0.433	0.000	0.531	2L.1

- Land sales of £0.5m include sales of surplus land, particularly at wastewater treatment sites.
- The reduction in land sales of £0.4m is primarily associated with the sales of telecommunication masts in 2020/2021, which has not been repeated in 2021/2022.

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 2M

Revenue reconciliation for the 12 months ended 31 March 2022 – wholesale

Line description	Units	DPS	Water resources	Water Network+	Wastewater Network+	Bioresources	Additional Control	Total	RAG 4 reference
Revenue recognised									
Wholesale revenue governed by price control	£m	3	70.093	395.065	505.072	78.592	0.000	1,048.822	2M.1
Grants & contributions (price control)	£m	3	0.000	17.704	11.063	0.000	0.000	28.767	2M.2
Total revenue governed by wholesale price control	£m	3	70.093	412.769	516.135	78.592	0.000	1,077.589	2M.3
Calculation of the revenue cap									
Allowed wholesale revenue before adjustments (or modified by CMA)	£m	3	68.161	390.090	481.139	76.227	0.000	1,015.617	2M.4
Allowed grants & contributions before adjustments (or modified by CMA)	£m	3	0.000	11.519	8.130	0.000	0.000	19.649	2M.5
Revenue adjustment	£m	3	0.000	-4.072	23.435	0.000	0.000	19.363	2M.6
Other adjustments	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	2M.7
Revenue cap	£m	3	68.161	397.537	512.704	76.227	0.000	1,054.629	2M.8
Calculation of the revenue imbalance									
Revenue cap	£m	3	68.161	397.537	512.704	76.227	0.000	1,054.629	2M.9
Revenue Recovered	£m	3	70.093	412.769	516.135	78.592	0.000	1,077.589	2M.10
Revenue imbalance	£m	3	-1.932	-15.232	-3.431	-2.365	0.000	-22.960	2M.11

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Water resources price control

The received wholesale water resources revenue recovered for 2021/2022 is £70.1m compared to that assumed at the Final Determination of £68.2m, a difference of £1.9m – 2.8%.

Water Networks+ price control

The received wholesale water Network+ revenue recovered for 2021/2022, is £412.8m compared to that assumed at the Final Determination of £397.5m, a difference of £15.2m – 3.8%.

Wholesale wastewater Network+ price control

The actual wholesale wastewater Network+ revenue recovered for 2021/2022 is £516.1m compared to that assumed at the Final Determination of £512.7m, a difference of £3.4m – 0.7%.

The differences for the 3 price controls noted above will be considered through Revenue Forecasting Incentive (RFI) mechanism for 2022/2023 revenue allowances.

Bioresources price control

The actual wholesale Bioresources revenue recovered for 2021/2022 is £78.6m compared to that assumed at the Final Determination of £76.2m, a difference of £2.4m – 3.1%.

This variance will be considered for the 2023/2024 revenue allowance through the Bioresources revenue reconciliation model.

Table 2N**Residential retail – social tariffs**

Line description	Revenue	Number of customers	Average amount per customer	RAG 4 reference
Units DPs	£m 3	000s 3	£ 3	
Number of residential customers on social tariffs				
Residential water only social tariffs customers		0.032		2N.1
Residential wastewater only social tariffs customers		0.745		2N.2
Residential dual service social tariffs customers		29.764		2N.3
Number of residential customers not on social tariffs				
Residential water only no social tariffs customers		112.668		2N.4
Residential wastewater only no social tariffs customers		120.175		2N.5
Residential dual service no social tariffs customers		1,989.568		2N.6
Social tariff discount				
Average discount per water only social tariffs customer			93.750	2N.7
Average discount per wastewater only social tariffs customer			126.174	2N.8
Average discount per dual service social tariffs customer			207.163	2N.9
Social tariff cross-subsidy – residential customers				
Total customer funded cross-subsidies for water only social tariffs customers	0.002			2N.10
Total customer funded cross-subsidies for wastewater only social tariffs customers	0.064			2N.11
Total customer funded cross-subsidies for dual service social tariffs customers	4.197			2N.12
Average customer funded cross-subsidy per water only social tariffs customer			0.018	2N.13
Average customer funded cross-subsidy per wastewater only social tariffs customer			0.529	2N.14
Average customer funded cross-subsidy per dual service social tariffs customer			2.078	2N.15
Social tariff cross-subsidy – company				
Total revenue forgone by company to fund cross-subsidies for water only social tariffs customers	0.001			2N.16
Total revenue forgone by company to fund cross-subsidies for wastewater only social tariffs customers	0.030			2N.17
Total revenue forgone by company to fund cross-subsidies for dual service social tariffs customers	1.969			2N.18
Average revenue forgone by company to fund cross-subsidy per water only social tariffs customer			31.250	2N.19
Average revenue forgone by company to fund cross-subsidy per wastewater only social tariffs customer			40.268	2N.20
Average revenue forgone by company to fund cross-subsidy per dual service social tariffs customer			66.154	2N.21
Social tariff support – willingness to pay				
Level of support for social tariff customers reflected in business plan			4.000	2N.22
Maximum contribution to social tariffs supported by customer engagement			4.650	2N.23

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Number of residential customers on social tariffs	Number of customers 2020/2021	Number of customers 2021/2022
Residential water only social tariffs customers	88	32
Residential wastewater only social tariffs customers	413	745
Residential dual service social tariffs customers	23,666	29,764

For 2021/2022, the eligibility criteria to join the scheme was amended from the customer needing to make a minimum saving, to being any saving. Although this has therefore opened up more opportunity for our customers to qualify, as displayed in the above table, these customers will have likely made a smaller saving reducing the overall average for 2021/2022, as you can see from the below table.

Social tariff discount	Average amount per customer 2020/2021	Average amount per customer 2021/2022
Average discount per water only social tariffs customer	£90.91	£93.75
Average discount per wastewater only social tariffs customer	£130.75	£126.17
Average discount per dual service social tariffs customer	£213.68	£207.16

As displayed in the below table, 2021/2022 saw the average dual service increase by 53p, per customer when compared to 2020/2021.

Social tariff cross-subsidy - residential customers	Average amount per customer 2020/2021	Average amount per customer 2021/2022
Average customer funded cross-subsidy per water only social tariffs customer	£0.05	£0.02
Average customer funded cross-subsidy per wastewater only social tariffs customer	£0.29	£0.53
Average customer funded cross-subsidy per dual service social tariffs customer	£1.55	£2.08

Table 20

Historic cost analysis of intangible fixed assets

Line description	Units	DPs	Residential Retail	Business Retail	Water Resources	Water Network+	Wastewater Network+	Bioresources	Additional Control	Total	RAG 4 reference
Cost											
At 1 April 2021	£m	3	6.493	0.000	3.078	11.859	201.926	0.000	0.000	223.356	20.1
Disposals	£m	3	0.000	0.000	0.000	-1.469	-9.427	0.000	0.000	-10.896	20.2
Additions	£m	3	10.897	0.000	-2.085	2.734	31.122	0.000	0.000	42.668	20.3
Adjustments	£m	3	0.000	0.000	0.000	0.000	5.445	0.000	0.000	5.445	20.4
Assets adopted at nil cost	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.5
At 31 March 2022	£m	3	17.390	0.000	0.993	13.124	229.066	0.000	0.000	260.573	20.6
Amortisation											
At 1 April 2021	£m	3	-1.893	0.000	-0.282	-2.989	-62.273	0.000	0.000	-67.437	20.7
Disposals	£m	3	0.000	0.000	0.000	1.469	9.427	0.000	0.000	10.896	20.8
Adjustments	£m	3	0.000	0.000	0.293	6.232	-8.921	0.942	0.000	-1.454	20.9
Charge for year	£m	3	-1.692	0.000	-0.468	-8.481	-15.347	-0.942	0.000	-26.930	20.10
At 31 March 2022	£m	3	-3.585	0.000	-0.457	-3.769	-77.114	0.000	0.000	-84.925	20.11
Net book amount at 31 March 2022	£m	3	13.805	0.000	0.536	9.355	151.952	0.000	0.000	175.648	20.12
Net book amount at 1 April 2021	£m	3	4.600	0.000	2.796	8.870	139.653	0.000	0.000	155.919	20.13
Amortisation for year											
Principal services	£m	3	-1.692	0.000	-0.468	-8.481	-15.348	-0.942	0.000	-26.931	20.14
Third Party Services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	20.15
Total	£m	3	-1.692	0.000	-0.468	-8.481	-15.348	-0.942	0.000	-26.931	20.16

The net book value includes £46m in respect of assets in the course of construction.

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Table 20 analyses changes in the intangible fixed assets of both wholesale and retail activities of Yorkshire Water.

Our accounting policies in relation to fixed assets and depreciation are set out in full in note 1 of the statutory Annual Report and Financial Statements which can be found on our reports page here:

The table above details that the net book value of intangible fixed assets at 31 March 2022 amounts to £175.6m, an increase of £19.7m since the start of the year. This movement includes:

- Additions of £42.7m, mainly due to increased investment in software relating to data storage, cyber-security and improvements in customer service applications.
- Amortisation in the year is £26.9m, an increase of £2.4m on 2020/2021 due to the increased investment in software detailed above.
- Disposals in the year consist of asset-life expired software.

Technical notes

Included within amortisation and amortisation adjustments is the principal use recharge impact which in 2020/2021 was within depreciation and amortisation in [Table 2A](#). This approach has been consistently applied.

Table 3:

Performance

summary

Introduction

The information in this section details the 'Performance Summary' as required by Ofwat. A breakdown of how we performed against each of our Performance Commitments can be found in [section 3](#). The information in this section comprises the following tables:

- [Pro forma 3A](#) Outcome performance - Water common performance commitments
- [Pro forma 3B](#) Outcome performance - Wastewater common performance commitments
- [Pro forma 3C](#) Customer measure of experience (C-MeX) table
- [Pro forma 3D](#) Developer services measure of experience (D-MeX) table
- [Pro forma 3E](#) Outcome performance - Non financial performance commitments
- [Pro forma 3F](#) Underlying calculations for common performance commitments - water and retail
- [Pro forma 3G](#) Underlying calculations for common performance commitments - wastewater
- [Pro forma 3H](#) Summary information on outcome delivery incentive payments
- [Pro forma 3I](#) Supplementary outcomes information



AMP7 Reporter

2021/22 Annual Performance Assurance Report

Yorkshire Water

11 July 2022

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This document has 9 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
1	Draft for internal review	MB; HG; DB;MM; IM; NS; KA; AC; GI, GJ, JS, GS, RL	JAJ	JPA	JAJ	24/06/22
2	Draft for client	JAJ			JAJ	27/06/22
3	Draft final version	YWS feedback	JAJ	JPA	JPA	01/07/22
4	Final version	YWS feedback and final checks	JAJ	JPA	JPA	11/07/22

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Assurance Statement

Atkins is engaged by Yorkshire Water to provide independent assurance on non-financial aspects of the annual reporting activities that Yorkshire Water carries out. This assurance statement encapsulates observations we made during the technical audit of Yorkshire Water's Annual Performance Report for 2021/22. We presented our draft findings to Yorkshire Water's Regulation Team on 9th June 2022, the Yorkshire Water Audit and Risk Committee on 16th June 2022 and the Regulatory Issues Group on 22nd June 2022. This statement is part of a continuous improvement process that has involved detailed consideration of the methodologies and their application by which Yorkshire Water reports on its performance at financial year end.

For the areas we cover and from the information we have been provided, we conclude that the Company has a full understanding of and has sufficient processes and internal systems of control to meet its reporting obligations. We also conclude that the Company has appropriate systems and processes in place to allow it to manage its reporting risks.

Our approach to technical assurance is to draw upon our experiences at previous rounds of audit and to plan in detail who should be present, what information will be covered, where and when. We issue a notification, carry out the audit, provide immediate verbal feedback and a formal feedback summary including requests for further information or clarification with a table of issues raised. The issues from all of the audits and subsequent interactions are compiled into an Issues Log, which is used to manage the resolution of reporting issues before the finalisation of the technical assurance process. This statement reflects the technical assurance position after the iterative process of resolving outstanding issues has concluded.

Yorkshire Water has 44 Performance Commitments (PCs), 29 of which have associated financial penalties and in some cases rewards. As part of our independent assurance of Yorkshire Water's annual reporting, we have been engaged to audit the tables and submissions to be published in Yorkshire Water's 2021/22 Annual Performance Report and regulatory reporting to other bodies (e.g. CCW, Water UK, Drinking Water Inspectorate).

The areas in scope for this assurance are:

The areas in scope for assurance are:

- Data and commentary reported as part of the Annual Performance Report (APR) to Ofwat:
 - Table 3A, 3B, 3E, 3F, 3G, 3H and 3I - Outcome performance tables (common and bespoke measures)
 - Table 3C – C-MeX
 - Table 3D – D-MeX
 - Table 2B, 2E, 2K, 2N, 4A, 4D; 4E, 4F, 4G, 4J, 4K, 4L, 4M, 4N, 4O, 4P, 4Q, 4R, 5A, 6A, 6B, 6C, 6D, 7B, 7C, 7D, 7E, 8A, 8C, 8D, 9A – Asset and financial data
 - Bioresources Market Information and Market Activity
 - In period adjustments model
- DWI submission for water quality contacts
- Water UK Developer Services Levels of Service metrics

In a series of over 70 video enabled meetings, from April to June 2022, we carried out combined methodology and data audits designed to confirm whether:

- Yorkshire Water has appropriate systems, procedures and reporting mechanisms in place to control and meet its reporting obligations.
- Yorkshire Water understands the accuracy of the data that it is providing and is able to identify where specific reported data may not be appropriate to meet regulatory expectations. Many of the items that we audit inherently contain an element of uncertainty, so it is not possible to assure their absolute accuracy.
- The key assumptions and processes that are used to report against Yorkshire Water's Performance Commitments are consistent with the way that the target was set for the PR19 Final Determination or through the Competition and Markets Authority process.
- The methodologies that have been used for reporting of the common metrics are consistent with the technical guidance that has been published by Ofwat, and where there are shortfalls these

have been identified appropriately using the Red, Amber, Green classifications provided by Ofwat in the compliance checklists.

With this being the second report year of AMP7, there are some evolving Performance Commitments and Ofwat has again made a large number of changes to its Regulatory Accounting Guidelines (RAGs) where the definitions and reporting format for all annual reporting are stipulated. The ambiguities therein have been a challenge to the industry as a whole and it is anticipated the Ofwat clarifications will continue into the next reporting year and beyond as PR24 approaches. Established reporting processes demonstrate either consistent good practice or improvements from previous years. Our observation, common to new and established reporting, is that the extent to which checks and controls are explicitly indicated is variable; we believe considerably more is being done than can be evidenced and have suggested that the recording is improved going forward.

In our consideration of reporting methodologies and their application in our APR22 audits, we can see that further progress has been made on the methodologies, documentation and supporting evidence for AMP7 ODI reporting. We have seen a generally positive audit process, with challenge embraced and responded to but not always rapidly. There is still further work to do, but we have seen a continuing improvement culture.

There were in total 27 changes to methodology and/or reported data which were identified through the audit process and would have been material to this year's reporting but have been addressed prior to submission.

For the AMP7 ODIs reported in Tables 3A, 3B, 3C, 3D and 3E, there are seven areas where we identified "Amber" reporting risks to the business. This indicates shortfalls in methodology or that it is still in development and/or that there is incomplete data or minor errors. These do not materially impact on the performance reported relative to targets and threshold values. The "Ambers" relate to:

1. Significant Water Supply Events
2. Low Pressure
3. Pollution Incidents
4. Sewer Collapses
5. Surface Water Management
6. Household complaints (a subset of C-MeX)
7. Integrated Catchment Management

We believe that the published metrics provide a fair and reasonable account of Yorkshire Water's performance in 2021/22. While we observed a number of issues for which we provide comment within our main report, we believe these do not impact materially upon the potential to sign-off the Company submission.

We confirm that Yorkshire Water has provided us with full and transparent access to its systems and processes, including unrestricted access to all systems, files and documents that we requested from the Company. During the assurance activities, we had free access to the Director of Strategy and Regulation and his wider regulation team and the cooperation of the people responsible for preparing and reporting the 2021/22 APR and other regulatory submissions.



Jonathan Archer
Atkins Regulation Director
Lead Technical Assurer to Yorkshire Water

1. Scope of Work

Atkins Limited has been appointed to provide external assurance on the regulatory submissions presented by Yorkshire Water to Ofwat under the conditions set out in its Licence with the Secretary of State. There is also associated regulatory reporting to the EA, DWI, Water UK, CC Water and for Customers which falls within the scope of our assurance.

The areas in scope for assurance are:

- Data and commentary reported as part of the Annual Performance Report (APR) to Ofwat:
 - Table 3A, 3B, 3E, 3F, 3G, 3H and 3I - Outcome performance tables (common and bespoke measures)
 - Table 3C – C-MeX
 - Table 3D – D-MeX
 - Table 2B, 2E, 2K, 2N, 4A, 4D; 4E, 4F, 4G, 4J, 4K, 4L, 4M, 4N, 4O, 4P, 4Q, 4R, 5A, 6A, 6B, 6C, 6D, 7B, 7C, 7D, 7E, 8A, 8C, 8D, 9A – Asset and financial data
 - Bioresources Market Information and Market Activity
 - In period adjustments model
- DWI submission for water quality contacts
- Water UK Developer Services Levels of Service metrics

2. Key Findings

We classify our findings into 'red', 'amber' and 'green' categories. The definition for each category as follows:

- 'Red'. These are material reporting risks to the Company relating to either the application of the methodology, the accuracy of the reported data and/or the meeting of a performance commitment
- 'Amber'. These are significant issues where we identified reporting risks to the business. They may relate to the methodology and/or data, however they do not alter the performance reported relative to targets and threshold values.
- 'Green' signifies either no issues or relatively minor issues that are designed to provide continuous improvement to the reporting process and are highlighted within the individual audit summaries that we provide for the Company.

2.1. AMP7 Performance Commitments

Table 2-1 Summary of key findings

Performance Commitment	Methodology	Data
3A.1 Water quality compliance (CRI)	Green	Green
3A.2 Water supply interruptions	Green	Green
3A.3 Leakage	Green	Green
3A.4 Per capita consumption	Green	Green
3A.5 Mains repairs	Green	Green
3A.6 Unplanned outage	Green	Green

Performance Commitment	Methodology	Data
3A.7 Working with others	Green	Green
3A.8 Land conserved and enhanced	Green	Green
3A.9 Education	Green	Green
3A.10 Gap sites	Green	Green
3A.11 Managing void properties	Green	Green
3A.12 Drinking water contacts	Green	Green
3A.13 Significant water supply events	Amber	Amber
3A.14 Low pressure	Amber	Amber
3A.15 Repairing or replacing customer owned pipes	Green	Green
3B.1 Internal sewer flooding	Green	Green
3B.2 Pollution incidents	Amber	Green
3B.3 Sewer collapses	Amber	Green
3B.4 Treatment works compliance	Green	Green
3B.5 Length of river improved	Green	Green
3B.6 Operational Carbon	Green	Green
3B.7 Water recycling	N/A	N/A
3B.8 External sewer flooding	Green	Green
3B.9 Bathing water quality	Green	Green
3B.10 Surface water management	Amber	Amber
3B.11 Quality agricultural products	Green	Green
3B.12 Living with Water	Green	Green
3C Annual C-MeX score and total household complaints	Amber	Green
3D D-MeX score	Green	Green
3E.1 Risk of severe restrictions in a drought	Green	Green
Priority services for customers in vulnerable circumstances	Green	Green
3E.2 PSR reach		
3E.3 Attempted contacts		
3E.4 Actual contacts		
3E. 5 Risk of sewer flooding in a storm	Green	Green
3E.6 Integrated catchment management	Amber	Green
3E.7 Biosecurity implementation	Green	Green
3E.8 Capital carbon and emissions arising from owned land	Green	Green
3E.9 Creating value from waste	Green	Green
3E.10 Affordability of bills	Green	Green
3E.11 Direct support given to customers	Green	Green
3E.12 Cost of bad debt	Green	Green
3E.13 Priority services awareness	Green	Green

Performance Commitment	Methodology	Data
3E.14 Priority services satisfaction	Green	Green
3E.15 Inclusive customer service	Green	Green
3E.16 Renewable energy generation	Green	Green
3E.17 WINEP Delivery	Green	Green

2.2. Reporting of Additional Regulatory Information

We have reviewed other data reported and highlight, on an exception basis, areas of note encountered. There includes regulatory reporting to Ofwat, the EA, DWI, Water UK and CCW.

Table 2-2 Areas of note encountered during audit of additional regulatory information tables

Submission	Methodology	Data
2N Social tariffs	Amber	Amber
4A. 1-52 Bulk Supplies	Green	Green
4Q.13-14 Length of new mains (km) Requisitions and SLPs 6C.2-4 Total length of potable mains relined, renewed and total	Amber	Amber
Table 4R Population (Water and Wastewater)	Amber	Amber
Average pumping head: 5A.23 – raw water abstraction 6A.6 – raw water transport 6A.31 – water treatment 6B.28 – treated water distribution	Amber	Green
6C.9 Number of lead communication pipes 6C.10 Number of galvanised iron communication pipes 6C.11 Number of other communication pipes	Amber	Amber
Table 7B lines 1-10 - Large works classification Table 7D lines 1-16 - Number of works in each size band & loads received Table 7D lines 17-24 – Current PE with tightened or new consents	Green	Amber
7C 16-22 Length of Sewers	Green	Amber
7C 11,13,14 Sewer refurbishment / Sewer Profile	Amber	Amber
Bioresources Market Information	Green	Green
CCW Complaints categorisations	Green	Amber



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Table 3A**Outcome performance – Water performance commitments (financial)**

Line description	Unique reference	Unit	Decimal places	Performance level – actual	PCL met?	Outperformance or underperformance payment £m	Forecast of total 2020 – 25 outperformance or underperformance payment £m	RAG 4 reference
Common PCs – Water (Financial)								
Water quality compliance (CRI)	PR19YKY_20	number	2	4.83	No	-3.470	-3.886	3A.1
Water supply interruptions	PR19YKY_21	hh:mm:ss		00:10:38	No	-5.536	-6.445	3A.2
Leakage	PR19YKY_22	%	1	7.9	Yes	0.209	0.264	3A.3
Per capita consumption	PR19YKY_25	%	1	0.1	No	0.000	-3.019	3A.4
Mains repairs	PR19YKY_24	number	1	169.8	Yes	0.000	-3.290	3A.5
Unplanned outage	PR19YKY_23	%	2	3.82	Yes	0.000	0.000	3A.6
Bespoke PCs – Water and Retail (Financial)								
Working with others	PR19YKY_1	nr		16	Yes	0.000	0.000	3A.7
Land conserved and enhanced	PR19YKY_2	nr		6655.76	Yes	0.000	0.000	3A.8
Education	PR19YKY_7	nr		22576	Yes	0.000	-0.029	3A.9
Gap sites	PR19YKY_17	%		82.83	Yes	0.000	-1.122	3A.10
Managing void properties	PR19YKY_18	%	2	3.78	Yes	1.989	1.157	3A.11
Drinking water contacts	PR19YKY_26	nr	1	10.9	No	-0.369	0.553	3A.12
Significant water supply events	PR19YKY_27	nr		41	No	-7.420	-8.745	3A.13
Low pressure	PR19YKY_28	nr		4	Yes	0.000	0.000	3A.14
Repairing or replacing customer owned pipes	PR19YKY_29	nr		7335	Yes	0.101	-1.260	3A.15
Financial water performance commitments achieved	%				67			3A.27
Overall performance commitments achieved (excluding C-MeX and D-MeX)	%				56			3A.28

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 3B**Outcome performance – Wastewater performance commitments (financial)**

Line description	Unique reference	Unit	Decimal places	Performance level – actual	PCL met?	Outperformance or underperformance payment £m	Forecast of total 2020–25 outperformance or underperformance payment £m	RAG 4 reference
Common PCs – Wastewater (Financial)								
Internal sewer flooding	PR19YKY_31	Number of internal sewer flooding incidents per 10,000 sewer connection	2	2.83	No	-10.122	-19.147	3B.1
Pollution incidents	PR19YKY_30	Pollution incidents per 10,000 km of sewer length	2	27.36	No	-2.483	-2.261	3B.2
Sewer collapses	PR19YKY_33	Number of sewer collapses per 1,000 km of all sewers	2	11.71	Yes	0.000	0.000	3B.3
Treatment works compliance	PR19YKY_32	%	2	99.03	No	0.000	0.000	3B.4
Bespoke PCs – Wastewater (Financial)								
Length of river improved	PR19YKY_4	km	2	50.08	Yes	0.000	0.000	3B.5
Operational Carbon	PR19YKY_6a	%	1	6.8	Yes	0.472	0.755	3B.6
Water recycling	PR19YKY_9	nr	2	0	No	-0.041	-0.041	3B.7
External sewer flooding	PR19YKY_35	nr		4578	Yes	17.625	34.610	3B.8
Bathing water quality	PR19YKY_36	nr		16	No	-2.470	-2.470	3B.9
Surface water management	PR19YKY_37	nr		2	No	-0.010	-0.010	3B.10
Quality agricultural products	PR19YKY_40	%		100	Yes	0.000	0.000	3B.11
Living with Water scheme	PR19CMA_YKY-01	£m	3	1.612	-	0.000	0.000	3B.12

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Table 3C**Customer measure of experience (C-MeX) table**

Item	Unit	Value	RAG 4 reference
Annual customer satisfaction score for the customer service survey	Number	77.67	3C.1
Annual customer satisfaction score for the customer experience survey	Number	83.15	3C.2
Annual C-MeX score	Number	80.41	3C.3
Annual net promoter score	Number	33.00	3C.4
Total household complaints	Number	31731	3C.5
Total connected household properties	Number	2,349,669	3C.6
Total household complaints per 10,000 connections	Number	135.045	3C.7
Confirmation of communication channels offered	TRUE or FALSE	TRUE	3C.8

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Table 3D

Developer services measure of experience (D-MeX) table

Item	Unit	Value	RAG 4 reference
Qualitative component annual results	Number	48.23	3D.1
Quantitative component annual results	Number	61.93	3D.2
D-MeX score	Number	55.08	3D.3
Developer services revenue (water)	£m	18.547	3D.4
Developer services revenue (wastewater)	£m	12.157	3D.5

Calculating the D-MeX quantitative component

Water UK performance metric	Unit	Reporting period (1 April to 31 March)	Quantitative score (annual)	RAG 4 reference
W1.1	%	72.12%		3D.W1
W3.1	%	68.04%		3D.W2
W4.1	%	55.72%		3D.W3
W6.1	%	21.45%		3D.W4
W7.1	%	0.00%		3D.W5
W8.1	%	70.03%		3D.W6
W17.1	%	30.00%		3D.W7
W17.2	%			3D.W8
W18.1	%	68.00%		3D.W9
W20.1	%	50.00%		3D.W10
W21.1	%			3D.W11
W23.1	%	22.22%		3D.W12
W24.1	%			3D.W13
W26.1	%			3D.W14
W27.1	%	34.17%		3D.W15
W30.1	%	99.84%		3D.W16
WN1.1	%	85.29%		3D.W17
WN2.2	%	58.82%		3D.W18
WN4.1	%	44.44%		3D.W19
WN4.2	%			3D.W20
WN4.3	%	50.00%		3D.W21
S1.1	%	98.41%		3D.W22
S3.1	%	100.00%		3D.W23
S4.1	%			3D.W24
S7.1	%	97.30%		3D.W25
SAM - 3/1	%	100.00%		3D.W26
SAM - 4/1	%	100.00%		3D.W27
SLPM - S2/2a	%	36.36%		3D.W28
SLPM - S2/2b	%	18.67%		3D.W29
SLPM - S3	%	100.00%		3D.W30
SLPM - S1/2	%	37.06%		3D.W31
SLPM - S4/1	%			3D.W32

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Table 3D – Continued

Developer services measure of experience (D-MeX) table

Calculating the D-MeX quantitative component				
Water UK performance metric	Unit	Reporting period (1 April to 31 March)	Quantitative score (annual)	RAG 4 reference
SLPM – S5/1a	%			3D.W33
SLPM – S7/1	%			3D.W34
SN2.2	%	92.31%		3D.W35
SN4.1	%			3D.W36
D-MeX quantitative score (for the reporting period)	%	61.93%		
D-MeX quantitative score (annual)	Number		0.62	

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Table 3E**Outcome performance – Non financial performance commitments**

Line description	Unique reference	Unit	Decimal places	Performance level – actual	PCL met?	RAG 4 reference
Common						
Risk of severe restrictions in a drought	PR19YKY_38	%	1	4.0	No	3E.1
Priority services for customers in vulnerable circumstances – PSR reach	PR19YKY_42	%	1	3.9	No	3E.2
Priority services for customers in vulnerable circumstances – Attempted contacts	PR19YKY_42	%	1	45.2	No	3E.3
Priority services for customers in vulnerable circumstances – Actual contacts	PR19YKY_42	%	1	14.3	No	3E.4
Risk of sewer flooding in a storm	PR19YKY_34	%	2	5.65	Yes	3E.5
Bespoke PCs						
Integrated catchment management	PR19YKY_3	%	1	0	Yes	3E.6
Biosecurity implementation	PR19YKY_5	nr		2	No	3E.7
Capital carbon and emissions arising from owned land	PR19YKY_6b	%	1	44.5	Yes	3E.8
Creating value from waste	PR19YKY_8	£m		40	Yes	3E.9
Affordability of bills	PR19YKY_11	%		79	No	3E.10
Direct support given to customers	PR19YKY_12	nr		80778	Yes	3E.11
Cost of bad debt	PR19YKY_13	%	2	3.28	Yes	3E.12
Priority services awareness	PR19YKY_14	%		47	No	3E.13
Priority services satisfaction	PR19YKY_15	%		80	No	3E.14
Inclusive customer service	PR19YKY_16	%		20	Yes	3E.15
Renewable energy generation	PR19YKY_41	nr		322.9	Yes	3E.16
WINEP Delivery	PR19YKY_NEP01	text		Met	Yes	3E.17
Non-financial performance commitments achieved		%			53	3E.29

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Table 3F

Underlying calculations for common performance commitments – water and retail

Line description	Unit	Standardising data indicator	Standardising data numerical value	Performance level – Actual (current reporting year)	Performance level – Calculated (i.e. standardised)								RAG 4 reference
Performance commitments set in standardised units – Water													
Mains repairs – Reactive	Mains repairs per 1000 km	Mains length in km	32,114.60	3,326	103.57								3F.1
Mains repairs – Proactive	Mains repairs per 1000 km	Mains length in km	32,114.60	2,128	66.26								3F.2
Mains repairs	Mains repairs per 1000 km	Mains length in km	32,114.60	5,454	169.83								3F.3
Per capita consumption (PCC)	lpd	Total household population (000s) and household consumption (Ml/d)	5,325.80	700	131.51								3F.4
Line description	Unit	Performance level – actual (2017–18)	Performance level – actual (2018–19)	Performance level – actual (2019–20)	Baseline (average from 2017–18 to 2019–20)	Performance level – actual (2020–21)	Performance level – actual (2021–22)	Performance level – actual (2022–23)	Performance level – actual (2023–24)	Performance level – actual (2024–25)	Performance level 3 year average (current and previous 2 years)	Calculated performance level to compare against PCLs	RAG 4 reference
Performance commitments measured against a calculated baseline													
Leakage	Ml/d	323.0	324.1	298.7	315.3	289.8	283.1				290.5	7.9	3F.5
Per capita consumption (PCC)	lpd	128.3	128.6	127.7	128.2	125.1	131.5				128.1	0.1	3F.6

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Table 3F – Continued

Underlying calculations for common performance commitments – water and retail

Line description	Unit	Standardising data indicator	Standardising data numerical value	Total minutes lost	Number of properties supply interrupted	Calculated performance level	RAG 4 reference		
Water supply interruptions									
Water supply interruptions	Average number of minutes lost per property per year	Number of properties (thousands)	2,355.64	25067923	73,543	00:10:38	3F.7		
Line description	Current company level peak week production capacity (PWPC) MI/d	Reduction in company level PWPC MI/d	Outage proportion of PWPC %						
Unplanned or planned outage									
Unplanned outage	1,638.00	62.59	3.82%						3F.8
Line description	Total residential properties (000s)	Total number of households on the PSR (as at 31 March)	PSR reach	Total number of households on the PSR over a 2 year period	Number of attempted contacts over a 2 year period	Attempted contacts %	Number of actual contacts over a 2 year period	Actual contacts %	RAG 4 reference
Priority services for customers in vulnerable circumstances									
Priority services for customers in vulnerable circumstances	2,263.99	88,702	3.9%	55,237	24,963	45.2%	7,916	14.3%	3F.9

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Table 3G**Underlying calculations for common performance commitments – wastewater**

Line description	Unique reference	Unit	Standardising data indicator	Standardising data numerical value	Performance level – actual current reporting year	Calculated performance level	RAG 4 reference
Performance commitments set in standardised units							
Internal sewer flooding – customer proactively reported	PR19YKY_31	Number of internal sewer flooding incidents per 10,000 sewer connection	Number of sewer connections	2,344.98	572	2.44	3G.1
Internal sewer flooding – company reactively identified (ie neighbouring properties)	PR19YKY_31	Number of internal sewer flooding incidents per 10,000 sewer connection	Number of sewer connections	2,344.98	92	0.39	3G.2
Internal sewer flooding	PR19YKY_31	Number of internal sewer flooding incidents per 10,000 sewer connection	Number of sewer connections	2,344.98	664	2.83	3G.3
Pollution incidents	PR19YKY_30	Pollution incidents per 10,000 km of sewer length	Sewer length in km	52,263.00	143	27.36	3G.4
Sewer collapses	PR19YKY_33	Number of sewer collapses per 1,000 km of all sewers	Sewer length in km	52,431.00	614	11.71	3G.5

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Table 3H**Summary information on outcome delivery incentive payments**

Line description	Initial calculation of performance payments (excluding C-MeX and D-MeX) £m (2017-18 prices)	RAG 4 reference
Initial calculation of in period revenue adjustment by price control		
Water resources	0.02	3H.1
Water Network+	-16.63	3H.2
Wastewater Network+	-6.24	3H.3
Bioresources (sludge)	0.13	3H.4
Residential retail	1.99	3H.5
Business retail	0.00	3H.6
Dummy control	0.00	3H.7
Initial calculation of end of period revenue adjustment by price control		
Water resources	0.27	3H.8
Water Network+	-1.38	3H.9
Wastewater Network+	1.32	3H.10
Bioresources (sludge)	0.00	3H.11
Residential retail	0.00	3H.12
Business retail	0.00	3H.13
Dummy control	0.00	3H.14
Initial calculation of end of period RCV adjustment by price control		
Water resources	0.00	3H.15
Water Network+	0.00	3H.16
Wastewater Network+	0.00	3H.17
Bioresources (sludge)	0.00	3H.18
Residential retail	0.00	3H.19
Business retail	0.00	3H.20
Dummy control	0.00	3H.21

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 31**Supplementary outcomes information**

Line description	Current company level peak week production capacity (PWPC) MI/d		Reduction in company level PWPC MI/d	Outage proportion of PWPC %							RAG 4 reference	
Unplanned or planned outage												
Planned outage	1,638.00		23.81	1.45%							31.1	
Line description	Deployable output	Outage allowance	Dry year demand	Target headroom	Total population supplied	Customers at risk						
Risk of severe restrictions in drought												
Risk of severe restrictions in drought	1,449.28	52.53	1,267.65	112.63	5,344,620	0.00						31.2
Line description	Total pe served	Total pe in excluded catchments	Percentage of total pe in excluded catchments	Total pe Option 1a	Percentage of total pe Option 1a	Total pe Option 1b	Percentage of total pe Option 1b	Vulnerability risk grade				
								Low	Medium	High		
Percentage of total population served												
Risk of sewer flooding in a storm												
Risk of sewer flooding in a storm	5,201,658.00	0.00	0.00%	228,263	4.39%	4,973,395	95.61%	94.35%	0.28%	5.37%	31.3	
Line description	Number of patch repairs or relining undertaken on sewer and not included in reported sewer collapses											
Sewer collapses												
Sewer collapses	1,334										31.4	

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Table 4:

Additional regulatory information – service level

Introduction

The information in this section details ‘Additional regulatory information – service level’ as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables:

- [**Pro forma 4A**](#) Water bulk supply information for the 12 months ended 31 March 2022
- [**Pro forma 4B**](#) Analysis of debt
- [**Pro forma 4C**](#) Impact of price control performance to date on RCV
- [**Pro forma 4D**](#) Totex analysis for the 12 months ended 31 March 2022 – water resources and water Network+
- [**Pro forma 4E**](#) Totex analysis for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources
- [**Pro forma 4F**](#) Major project expenditure for wholesale water by purpose
- [**Pro forma 4G**](#) Major project expenditure for wholesale wastewater by purpose
- [**Pro forma 4H**](#) Financial metrics for the 12 months ended 31 March 2022
- [**Pro forma 4I**](#) Financial derivatives
- [**Pro forma 4J**](#) Base expenditure analysis for the 12 months ended 31 March 2022 – water resources and water Network+
- [**Pro forma 4K**](#) Base expenditure analysis for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources
- [**Pro forma 4L**](#) Enhancement expenditure for the 12 months ended 31st March 2022 – water resources and water Network+
- [**Pro forma 4M**](#) Enhancement expenditure for the 12 months ended 31st March 2022 – wastewater Network+ and bioresources

Pro forma 4N Developer services expenditure for the 12 months ended 31st March 2022 – water resources and water Network+ (price control)

Pro forma 4O Developer services expenditure for the 12 months ended 31st March 2022 – wastewater Network+ and bioresources (price control)

Pro forma 4P Developer services non-price control expenditure for the 12 months ended 31 March 2022

Pro forma 4Q Developer services – Non financial information

Pro forma 4R Connected properties, customers and population

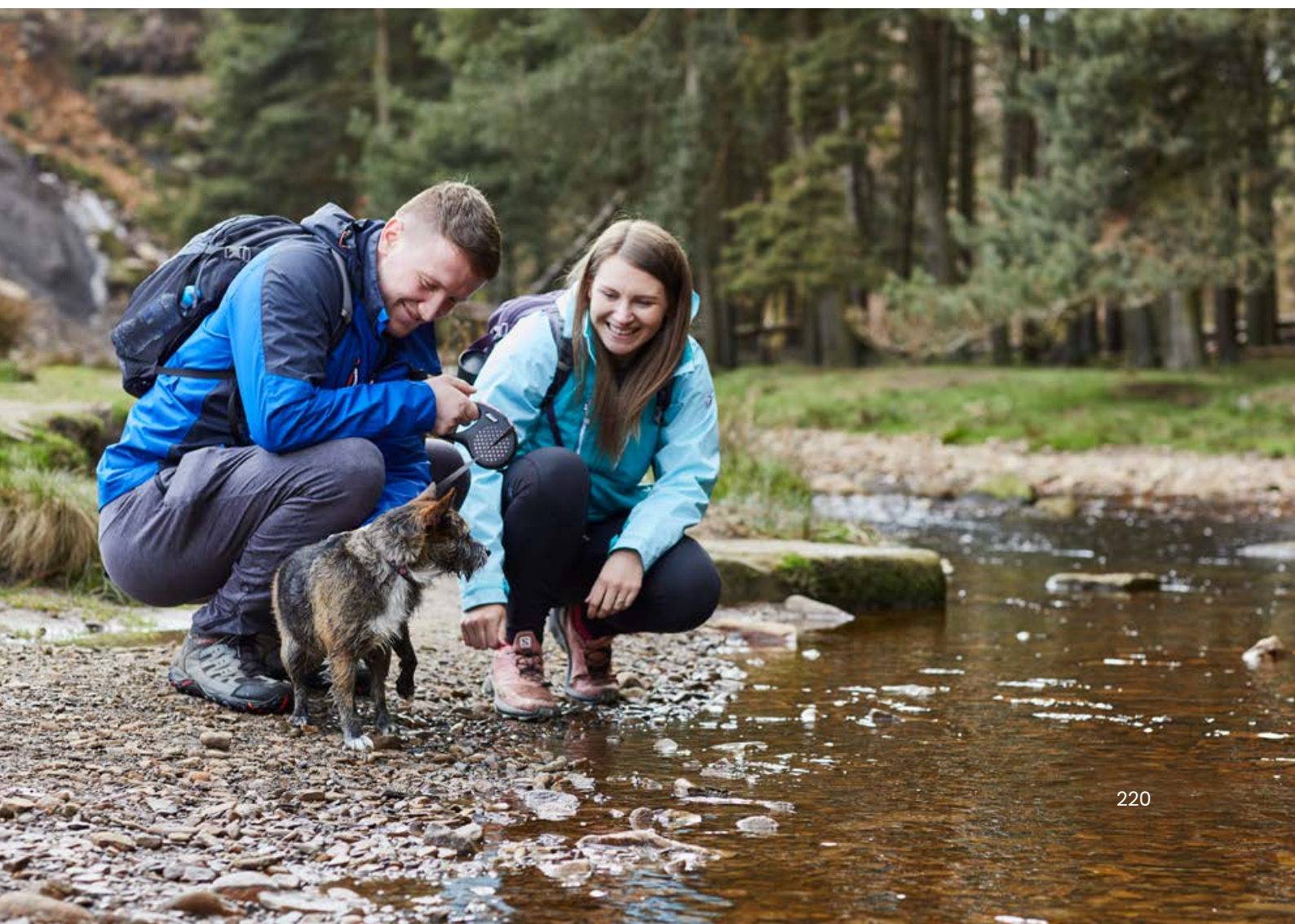


Table 4A**Water bulk supply information for the 12 months ended 31 March 2022**

Line description	Volume	Operating costs	Revenue	RAG 4 reference
Units DPs	MI 3	£m 3	£m 3	
Bulk supply exports				
Bulk supply 1	107.621	0.000	0.126	4A.1
Bulk supply 2	0.355	0.000	0.001	4A.2
Bulk supply 3	95.351	0.000	0.111	4A.3
Bulk supply 4	0.332	0.000	0.000	4A.4
Bulk supply 5	0.000	0.000	0.000	4A.5
Bulk supply 6	0.000	0.000	0.000	4A.6
Bulk supply 7	0.000	0.000	0.000	4A.7
Bulk supply 8	0.000	0.000	0.000	4A.8
Bulk supply 9	0.000	0.000	0.000	4A.9
Bulk supply 10	0.000	0.000	0.000	4A.10
Total bulk supply exports	203.659	0.000	0.238	4A.26
Bulk supply imports				
Bulk supply 1	19,460.310	3.978		4A.27
Bulk supply 2	0.000	0.000		4A.28
Bulk supply 3	0.000	0.000		4A.29
Bulk supply 4	0.000	0.000		4A.30
Bulk supply 5	0.000	0.000		4A.31
Bulk supply 6	0.000	0.000		4A.32
Bulk supply 7	0.000	0.000		4A.33
Bulk supply 8	0.000	0.000		4A.34
Bulk supply 9	0.000	0.000		4A.35
Bulk supply 10	0.000	0.000		4A.36
Total bulk supply imports	19,460.310	3.978		4A.52

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4A.1–26 Volume: We have four bulk supply exports to report for 2021/2022 which are Finningley, Bradway, Independent Water Networks Limited (IWNL) and Leep. The below table shows how the reported volume, in megalitres, compares to 2020/2021, with the largest growth

Line No	2020/2021	2021/2022
4A.1 Finningley	113.382	107.621
4A.2 Bradway	0.475	0.355
4A.3 IWNL	18.884	95.351
4A.4 Leep	n/a	0.332
4A.26 Total bulk supply exports	132.741	203.659

Finningley is cross reported with Anglian and we have noted that Anglian are reporting a slightly higher volume (115.117 Ml) to us this year. Anglian have however, confirmed that their volume is partially estimated rather than being based on actual meter readings which explains the difference.

4A.27–52 Volume: We import a volume of raw water (approx. 50 Ml/d) from Severn Trent Waters' Ladybower Reservoir to our Rivelin Lower Reservoir. This below table shows the trend over the previous four years:

Line No	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
4A.52 Bulk supply imports	17948.875	21937.800	20925.330	19460.310

Operating costs – bulk supply exports

Similar to last year, for 2021/2022 operating cost information has not been shown for the three supplies to Anglian, Bradway Grange Farm or the New Appointments and Variations (NAVs) as all these supplies are from the water distribution network and therefore operating costs and depreciation are not separately identifiable.

Table 4B

Analysis of debt for the 12 months ended 31 March 2022

Due to the size of the data table, we have published Table 4B separately on our website here:

The table itself displays our analysis of debt per 'fixed rate instrument' and 'Floating rate instrument' for 2021/2022 and provides the following information:

- | | | |
|---------------------------------|--|--|
| • Instrument | • Years to maturity | • Margin over reference benchmark rate |
| • Issuer | • Original issuance/facility size | • Nominal interest rate |
| • Category | • Principal sum outstanding | • Nominal interest cost |
| • Maturity type | • Amount used to calculate nominal interest cost and cash interest payment | • Cash interest cost |
| • Instrument identifier | • Years to maturity x principal sum | • Utilisation fee |
| • Seniority | • RPI interest rate | • Commitment fee |
| • Long-term issue credit rating | • CPI interest rate | • Issuance costs |
| • Currency | • Reference benchmark | • Value per balance sheet |
| • Issue date | • Reference benchmark rate | • Fair value of debt |
| • Issue price | | • Further information |
| • Maturity date | | |

All entries in Table 4B agree to [Table 1E](#).



Table 4C

Impact of price control performance to date on RCV

			12 months ended 31 March 2022					Price control period to date					
Line description	Units	DPs	Water re- sources	Water Network+	Waste- water Network+	Bio- resources	Additional Control	Water resources	Water Network+	Waste- water Network+	Bio- resources	Additional Control	RAG 4 reference
Totex (net of business rates, abstraction licence fees and grants and contributions)													
Final determination allowed totex (net of business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)	£m	3	31.306	310.253	546.422	66.260	0.000	66.705	604.239	1,075.880	129.276	0.000	4C.1
Actual totex (excluding business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)	£m	3	40.743	334.457	385.656	42.433	0.000	69.810	661.530	767.480	104.420	0.000	4C.2
Transition expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.405	0.793	5.357	0.083	0.000	4C.3
Disallowable costs	£m	3	0.000	0.553	1.543	0.000	0.000	0.009	1.048	2.277	0.045	0.000	4C.4
Total actual totex (net of business rates, abstraction licence fees and grants and contributions)	£m	3	40.743	333.904	384.113	42.433	0.000	70.206	661.275	770.560	104.458	0.000	4C.5
Variance	£m	3	9.437	23.651	-162.309	-23.827	0.000	3.501	57.036	-305.320	-24.818	0.000	4C.6
Variance due to timing of expenditure	£m	3	7.080	8.116	-198.248	-13.801	0.000	0.234	26.001	-385.611	-14.553	0.000	4C.7
Variance due to efficiency	£m	3	2.357	15.535	35.939	-10.026	0.000	3.267	31.035	80.291	-10.265	0.000	4C.8
Customer cost sharing rate – outperformance	%	2	55.00%	55.00%	55.00%	0.00%	0.00%	55.00%	55.00%	55.00%	0.00%	0.00%	4C.9
Customer cost sharing rate – underperformance	%	2	45.00%	45.00%	45.00%	0.00%	0.00%	45.00%	45.00%	45.00%	0.00%	0.00%	4C.10
Customer share of totex overspend	£m	3	1.061	6.991	16.173	0.000	0.000	1.470	13.966	36.131	0.000	0.000	4C.11
Customer share of totex underspend	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4C.12
Company share of totex overspend	£m	3	1.296	8.544	19.766	0.000	0.000	1.797	17.069	44.160	0.000	0.000	4C.13
Company share of totex underspend	£m	3	0.000	0.000	0.000	-10.026	0.000	0.000	0.000	0.000	-10.265	0.000	4C.14

Key

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Table 4C – Continued
Impact of price control performance to date on RCV

			12 months ended 31 March 2022					Price control period to date					
Line description	Units	DPs	Water re- sources	Water Network+	Waste- water Network+	Bio- resources	Additional Control	Water resources	Water Network+	Waste- water Network+	Bio- resources	Additional Control	RAG 4 reference
Totex – business rates and abstraction licence fees													
Final determination allowed totex – business rates and abstraction licence fees	£m	3	14.088	33.245	17.880	1.233	0.000	27.679	65.318	35.128	2.423	0.000	4C.15
Actual totex – business rates and abstraction licence fees	£m	3	13.488	33.682	17.007	2.479	0.000	27.095	67.282	33.302	2.810	0.000	4C.16
Variance – business rates and abstraction licence fees	£m	3	-0.600	0.437	-0.873	1.246	0.000	-0.584	1.964	-1.826	0.387	0.000	4C.17
Customer cost sharing rate – business rates	£m	3	85.00%	82.34%	90.00%	89.66%	0.00%	85.94%	86.61%	90.00%	88.87%	0.00%	4C.18
Customer cost sharing rate – abstraction licence fees	£m	3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4C.19
Customer share of totex over/underspend – business rates and abstraction licence fees	£m	3	-0.510	0.360	-0.786	1.117	0.000	-0.502	1.701	-1.643	0.344	0.000	4C.20
Company share of totex over/underspend – business rates and abstraction licence fees	£m	3	-0.090	0.077	-0.087	0.129	0.000	-0.082	0.263	-0.183	0.043	0.000	4C.21
Totex not subject to cost sharing													
Final determination allowed totex – not subject to cost sharing	£m	3	0.000	2.664	0.019	0.000	0.000	0.155	6.346	0.931	0.238	0.000	4C.22
Actual totex – not subject to cost sharing	£m	3	0.000	2.056	7.357	0.000	0.000	0.936	15.092	8.445	0.303	0.000	4C.23
Variance – 100% company allocation	£m	3	0.000	-0.608	7.338	0.000	0.000	0.781	8.746	7.514	0.065	0.000	4C.24
Total customer share of totex over/ under spend	£m	3	0.551	7.351	15.387	1.117	0.000	0.968	15.667	34.488	0.344	0.000	4C.25

Table 4C – Continued
Impact of price control performance to date on RCV

			12 months ended 31 March 2022					Price control period to date					
Line description	Units	DPs	Water re-sources	Water Network+	Waste-water Network+	Bio-resources	Additional Control	Water resources	Water Network+	Waste-water Network+	Bio-resources	Additional Control	RAG 4 reference
RCV													
Total customer share of totex over/under spend	£m	3	0.551	7.351	15.387	1.117	0.000	0.968	15.667	34.488	0.344	0.000	4C.26
PAYG rate	£m	3	86.683%	71.736%	36.177%	56.693%	0.000%	85.647%	72.849%	40.139%	56.743%	0.000%	4C.27
RCV element of cumulative totex over/underspend	£m	3	0.073	2.078	9.820	0.484	0.000	0.139	4.254	20.645	0.149	0.000	4C.28
Adjustment for ODI outperformance payment or underperformance payment	£m	3						0.000	0.000	0.000	0.000	0.000	4C.29
Green recovery	£m	3						0.000	0.000	0.000		0.000	4C.30
RCV determined at FD at 31 March	£m	3						614.265	2,502.548	4,301.737	327.353	0.000	4C.31
Projected 'shadow' RCV	£m	3						614.404	2,506.802	4,322.382	327.502	0.000	4C.32

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Totex (net of business rates, abstraction licence fees and grants and contributions) (Lines 1-14)

4C.1: This was provided by Ofwat in the Financial Flows Data spreadsheet and was inflated to nominal prices from 2017-18 Average CPIH price base.

4C.2: This has been calculated as per the Ofwat line definition, however we have included the impact of insurance income related to flood recovery claims within the wastewater network control. The value of this income is £3.0m 2021/2022 (£5.7m 2020/2021).

Line 4C.3: We have included the transitional totex that we incurred in 2018/2019 and 2019/2020 within our cumulative position.

4C.4: This has been calculated as per the Ofwat line definition.

4C.7: We have included an adjustment to reflect the impact of timing differences.

4C.9: This reflects the sharing rates which were included in the CMA FD19.

4C.10: This reflects the sharing rates which were included in the CMA FD19.

Totex – business rates and abstraction licence fees (Lines 15-21)

We have included our Industrial Emissions Directive (IED) expenditure within Bioresources as 4C had not been updated to include this specifically.

4C.15: This was provided by Ofwat in the Financial Flows Data spreadsheet and was inflated to nominal prices from 2017/2018 Average CPIH price base. As we have no allowance for IED then no adjustment was required.

4C.16: We have included IED expenditure into this line.

4C.18: This line is used in the table to provide the sharing value of business rates, abstraction and IED, therefore this line includes the weighted % for each price control after the different sharing rates were applied.

Totex not subject to cost sharing (Lines 22-24)

4C.22: This was provided by Ofwat in the Financial Flows Data spreadsheet and was inflated to nominal prices from 2017/2018 Average CPIH price base.

4C.23: We have followed Ofwat guidance and have in addition included the CMA expenditure that we excluded from line 4C.2 within our cumulative position.

RCV (Lines 26-32)

4C.23: This was provided by Ofwat in the Financial Flows Data spreadsheet.

4C.31: This was published by Ofwat within the RCV spreadsheet.

Table 4D**Totex analysis for the 12 months ended 31 March 2022 – water resources and water Network+**

				Network+					
Line description	Units	DPs	Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	RAG 4 reference
Operating expenditure									
Base operating expenditure	£m	3	31.195	10.915	2.606	64.360	148.891	257.967	4D.1
Enhancement operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4D.2
Developer services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4D.3
Total operating expenditure excluding Third Party Services	£m	3	31.195	10.915	2.606	64.360	148.891	257.967	4D.4
Third Party Services	£m	3	0.000	0.000	0.000	0.000	1.448	1.448	4D.5
Total operating expenditure	£m	3	31.195	10.915	2.606	64.360	150.339	259.415	4D.6
Grants and contributions									
Grants and contributions - operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4D.7
Capital expenditure									
Base capital expenditure	£m	3	18.355	2.534	0.263	29.407	80.134	130.693	4D.8
Enhancement capital expenditure	£m	3	4.681	0.428	0.026	7.366	17.963	30.464	4D.9
Developer services capital expenditure	£m	3	0.000	0.007	0.000	0.000	21.783	21.790	4D.10
Total gross capital expenditure excluding Third Party Services	£m	3	23.036	2.969	0.289	36.773	119.880	182.947	4D.11
Third Party Services	£m	3	0.000	0.000	0.000	0.000	2.056	2.056	4D.12
Total gross capital expenditure	£m	3	23.036	2.969	0.289	36.773	121.936	185.003	4D.13
Grants and contributions									
Grants and contributions - capital expenditure	£m	3	0.000	0.000	0.000	0.080	19.343	19.423	4D.14
Net totex	£m	3	54.231	13.884	2.895	101.053	252.932	424.995	4D.15
Cash expenditure									
Pension deficit recovery payments	£m	3	0.321	0.084	0.070	1.353	3.907	5.735	4D.16
Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4D.17
Totex including cash items	£m	3	54.552	13.968	2.965	102.406	256.839	430.730	4D.18

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Table 4D – Continued

Totex analysis for the 12 months ended 31 March 2022 – water resources and water Network+

				Network+					
Line description	Units	DPs	Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	RAG 4 reference
Atypical expenditure									
COVID – Capex	£m	3	0.007	0.002	0.002	0.038	0.112	0.161	4D.19
AMP6 Flooding – Capex	£m	3	0.000	0.000	0.000	0.000	0.083	0.083	4D.20
Transformation Costs: 4D.1 – Base operating expenditure	£m	3	0.228	0.068	0.037	1.105	2.935	4.373	4D.21
Item 4	£m	3						0.000	4D.22
Item 5	£m	3						0.000	4D.23
Total atypical expenditure	£m	3	0.235	0.070	0.039	1.143	3.130	4.617	4D.24

Wholesale totex analysis – water

Table 4D provides information relating to wholesale water upstream services from raw water abstraction to water distribution, for further information please see [Table 2B](#).

Capital expenditure

Gross regulated capital expenditure associated with the delivery of the wholesale water resources programme in the current reporting year was £23.0m against a Final Determination of £15.9m.

A total of £18.4m has been expended within the water base programme to maintain and improve service where required, to support the delivery of our water and cross-business Performance Commitments, this is above the FD allowance of £12.2m.

The water resources enhancement capital expenditure in the current report year totals £4.7m against a final determination of £3.7m.

Gross regulated capital expenditure associated with the delivery of the wholesale water network programme in the current reporting year was £162.0m against a Final Determination of £144.4m. Included within this gross expenditure is a total of £0.2m which we have classified as Atypical expenditure associated with additional costs incurred due to COVID-19 (£0.2m) and Flood recovery (£0.1m).

A total of £112.3m has been expended within the water Network+ base programme to maintain and improve service where required, to support the delivery of our water and cross-business Performance Commitments, and £21.8m for developer services against a Final Determination base allowance of £108.8m, which also includes the allowance for all Developer services capital expenditure.

The water Network+ enhancement capital expenditure in the current report year totals £25.8m against a final determination of £35.5m.

Within the report year Third Party Services expenditure totalling £2.1m associated with Mains diversions which are NRSWA requests where a proportion of the income is received that offsets against the total scheme delivery cost. These costs are also reported in [Table 4P](#) and identified as non-price control diversions and as such not included in line 4N.7.

Income has been received totalling £19.4m from grants and contributions in the current year associated with the water Network+ programme against a Final Determination of £11.7m. All income is reported against the Water Network+ price control under Treated Water Distribution.

Further detailed information on the grants and contributions reported on line 4D.14 can be found in [Table 2E](#) which identifies all income received through grants and contributions by type.

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Operating expenditure

Overall, there is a decrease in wholesale water costs from 2020/2021. The increased costs in water resources is offset by a decrease in costs in water Network+.

The year on year increase in water resources is primarily due to periodic inspection and maintenance of our reservoirs.

Water Network+ has seen a decrease in operating costs from 2020/2021 despite severe storms and inflationary pressures.

- There have been several significant storms in 2021/2022, and Storm Arwen in November 2021 had a significant impact on the water price control, with a loss of power impacting our assets and customers.
- There has been a significant increase in costs for the water treatment upstream service due to increasing market pressures in the chemical supply chain passed on.
- Energy consumption has stayed relatively stable. However, unhedged has been exposed to the volatile market prices.
- A realignment of terms and conditions as well as inflationary pressures has resulted in increased staff costs.
- We continue to incur costs in relation to the transformation programme commenced last year across the business.
- Despite all these pressures the price control saw a decrease in costs due to:
 - In 2021/2022 costs in relation to the CMA referral and COVID-19 are no longer impacting our operating costs.
 - 2021/2022 experienced a milder summer, with no surge in demand as experienced in the previous year. A more benign winter led to a decrease in repair and maintenance costs.

There has been no operating expenditure in relation to enhanced or developer services for 2021/2022. For further commentary please see [4L](#) and [4N](#).

Cash expenditure

Pensions costs continue to be reflected in cash expenditure (£5.7m) rather than operating expenditure for the wholesale business. In relation to pension costs, RAG 4.10 states 'Companies that report under FRS102 should include the element of the statutory charge attributable to deficit payments in this line. In line with this guidance, pension costs for 2021/2022 are included in cash expenditure. This ensures comparability with the treatment of financial tables Ofwat required as part of the most recent Price Review and ensures comparability with the treatment applied by most of the water and sewerage companies who adopt different statutory accounting standards for pensions. This treatment is because Yorkshire Water's defined benefit scheme is accounted for under the FRS102 accounting standard which applies the same rules as a defined contribution scheme.

Atypical expenditure

Base operating expenditure includes atypical expenditure.

- Transformation costs: £4.3m relates to transformation expenditure including re-organisational costs to prepare the business for AMP7.

Technical notes

As per the information notice (IN22/01) the provision in relation to the innovation fund in 2021/2022 has been reversed with no corresponding adjustment to revenue. The accrual that was reported in 2020/2021 has also been reversed, with a corresponding adjustment to the regulatory profit and loss account reserves at 31 March 2021.

Table 4E

Totex analysis for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources

			Network+ Sewage collection			Network+ Sewage treatment		Bioresources				
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	Total	RAG 4 reference
Operating expenditure												
Base operating expenditure	£m	3	29.574	27.052	21.294	106.417	-0.095	7.612	11.636	9.195	212.685	4E.1
Enhancement operating expenditure	£m	3	0.000	0.000	0.000	0.081	0.000	0.000	0.000	0.000	0.081	4E.2
Developer services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4E.3
Total operating expenditure excluding Third Party Services	£m	3	29.574	27.052	21.294	106.498	-0.095	7.612	11.636	9.195	212.766	4E.4
Total Third Party Services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4E.5
Total operating expenditure	£m	3	29.574	27.052	21.294	106.498	-0.095	7.612	11.636	9.195	212.766	4E.6
Grants and contributions												
Grants and contributions - operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4E.7
Capital expenditure												
Base capital expenditure	£m	3	52.960	37.025	14.218	62.204	0.217	0.287	13.246	1.625	181.782	4E.8
Enhancement capital expenditure	£m	3	2.104	3.852	0.907	52.321	0.014	0.023	1.255	0.005	60.481	4E.9
Developer services capital expenditure	£m	3	2.651	1.740	0.605	-0.091	0.000	0.000	0.000	0.000	4.905	4E.10
Total gross capital expenditure excluding Third Party Services	£m	3	57.715	42.617	15.730	114.434	0.231	0.310	14.501	1.630	247.168	4E.11
Third Party Services	£m	3	2.892	3.184	1.281	0.000	0.000	0.000	0.000	0.000	7.357	4E.12
Total gross capital expenditure	£m	3	60.607	45.801	17.011	114.434	0.231	0.310	14.501	1.630	254.525	4E.13
Grants and contributions												
Grants and contributions - capital expenditure	£m	3	6.338	6.993	2.417	0.181	0.000	0.000	0.000	0.000	15.929	4E.14
Net totex	£m	3	83.843	65.860	35.888	220.751	0.136	7.922	26.137	10.825	451.362	4E.15

Key

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4E – Continued

Totex analysis for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources

			Network+ Sewage collection			Network+ Sewage treatment		Bioresources			Total	RAG 4 reference
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal		
Cash expenditure												
Pension deficit recovery payments	£m	3	1.312	1.019	1.102	2.344	0.042	0.084	0.684	0.028	6.615	4E.16
Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4E.17
Totex including cash items	£m	3	85.155	66.879	36.990	223.095	0.178	8.006	26.821	10.853	457.977	4E.18
			Network+			Network+		Bioresources			Total	
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal		
Atypical expenditure												
COVID – Capex	£m	3	0.661	0.728	0.293	0.548	0.000	0.004	0.026	0.000	2.260	4E.19
AMP6 Flooding – Capex	£m	3	0.147	0.162	0.065	1.695	0.028	0.000	-0.032	0.000	2.065	4E.20
Transformation Costs: 4e.1 – Base operating expenditure	£m	3	0.984	0.649	0.642	2.032	0.033	0.254	0.391	0.089	5.074	4E.21
Item 4	£m	3									0.000	4E.22
Item 5	£m	3									0.000	4E.23
Total atypical expenditure	£m	3	1.792	1.539	1.000	4.275	0.061	0.258	0.385	0.089	9.399	4E.24

Key

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Wholesale totex analysis – wastewater

Table 4E provides information relating to wholesale wastewater upstream services from sewage collection to sludge disposal, for further information please see [Table 2B](#).

Capital expenditure

Gross regulated capital expenditure associated with the delivery of the wholesale wastewater Network+ programme in the current reporting year was £238.1m against a Final Determination of £419.4m. Included within this gross expenditure is a total of £4.3m which we have classified as Atypical expenditure associated with additional costs incurred due to COVID-19 (£2.3m) and Flood recovery (£2.1m).

A total of £166.6m has been expended within the wastewater Network+ base programme to maintain and improve service where required to support the delivery of our wastewater and cross-business Performance Commitments, and £4.9m of developer services capital against a Final Determination allowance of £179.6m which also includes the allowance for all developer services capital expenditure.

The wastewater Network+ enhancement capital expenditure in the current report year totals £59.2m against a final determination of £239.8m. The delay on spend in year 2 continues from year 1 as we drive the efficiencies that are required to deliver the WINEP and DWI quality programmes within the Final Determination funding, further work in ongoing, by our Strategic Planning Partner Stantec, to ensure that the best overall Totex solutions are promoted. Despite the delay we are confident that no regulatory compliance dates have been put at risk, as we are forecasting to meet corresponding regulatory dates.

Within the report year Third Party Services expenditure totalling £7.4m associated with Sewer diversions which are NRSWA requests where income is received that offsets against our total scheme delivery costs. These costs are also reported in [Table 4P](#) and identified as non-price control diversions and as such not included in line 4N.7.

A total of £15.9m of grants and contributions has been received in the current year associated with the wholesale wastewater programme against a Final Determination of £8.3m. All income is reported against the Wastewater Network+ price control under sewage collection.

Further detailed information on the grants and contributions, reported on line 4E.14, can be found in [Table 2E](#) which identifies all income received through grants and contributions by type.

Gross regulated capital expenditure associated with the delivery of the wholesale bioresources programme in the current reporting year was £16.5m against a Final Determination of £29.2m.

A total of £15.2m has been expended within the bioresources base programme to maintain and improve service where required against a Final Determination allowance of £29.1m.

The bioresources enhancement capital expenditure in the current report year totals £1.3m.

Operating expenditure

Overall, there was a decrease in wholesale wastewater costs from 2020/2021.

Operating costs in sewage collection upstream service have decreased as a result of:

- Increased investment in prior years to improve performance in readiness for enhanced AMP7 has led to decreased operating costs in 2021/2022.
- There has also been a decrease in operating costs compared to last year as we drive to improve 'first time fixes'.
- In 2021/2022, costs in relation to the CMA referral and COVID-19 are no longer impacting operating costs.

Operating costs in sewage treatment upstream service have increased due to:

- Unhedged energy costs has been impacted by the volatile market prices.
- Increased market pressures in the chemical supply chain.
- There have been several significant storms in 2021/2022 from Storm Arwen in November 2021 to storms Dudley, Eunice and Franklin in February 2022, with damage to our assets from strong winds.
- Strong treatment works compliance has continued in 2021/2022 for sewage treatment upstream service.

Operating costs in the bioresources price control has decreased:

- Great generation performance at our sites has resulted in a reduction of purchased energy.
- H&C costs have increased due to the full year impact of the outsourcing of our sludge transport function. Though there has been an increase from an Opex perspective, from an overall totex perspective bioresources will see a benefit over AMP7.

Wastewater continues to incur costs in relation to the transformation programme commenced last year across the business.

A realignment of terms and conditions as well as inflationary pressures has resulted in increased staff costs across wastewater.

There has been minimal operating expenditure in relation to enhanced and no operating costs in relation to developer services for 2021/2022. For further information please see [4M](#) and [4O](#).

Cash expenditure

Pensions costs continue to be presented in cash expenditure (£5.0m) rather than operating expenditure for the wholesale business. In relation to pension costs, RAG 4.10 states 'Companies that report under FRS102 should include the element of the statutory charge attributable to deficit payments in this line'. In line with this guidance, pension costs for 2021/2022 are included in cash expenditure. This ensures comparability with the treatment of financial tables Ofwat required as part of the most recent Price Review and ensures comparability with the treatment applied by most of the water and sewerage companies who adopt different statutory accounting standards for pensions. This treatment is because Yorkshire Water's defined benefit scheme is accounted for under the FRS102 accounting standard which applies the same rules as a defined contribution scheme.

Atypical expenditure

Base operating expenditure includes atypical expenditure.

- Transformation costs: £5.0m relates to transformation expenditure including re-organisational costs to prepare the business for AMP7.

Technical notes

As per the information notice (IN22/01) the provision in relation to the innovation fund in 2021/2022 has been reversed with no corresponding adjustment to revenue. The accrual that was reported in 2020/2021 has also been reversed, with a corresponding adjustment to the regulatory profit and loss account reserves at 31 March 2021.

Table 4F
Major project expenditure for wholesale water by purpose for the 12 months ended 31 March 2022

			Expenditure in report year £m						Cumulative expenditure on schemes completed in the report year £m						
			Water Network+						Water Network+						
Line description	Units	DPs	Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	RAG 4 reference
Major project capital expenditure by purpose															
Capital expenditure purpose - line 1	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.1
Capital expenditure purpose - line 2	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.2
Capital expenditure purpose - line 3	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.3
Capital expenditure purpose - line 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.4
Capital expenditure purpose - line 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.5
Capital expenditure purpose - line 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.6
Capital expenditure purpose - line 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.7
Capital expenditure purpose - line 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.8
Capital expenditure purpose - line 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.9
Capital expenditure purpose - line 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.10
Total major project capital expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.11

Key

 Input cell  Calculation cell  Copy cell

Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4F – Continued
Major project expenditure for wholesale water by purpose for the 12 months ended 31 March 2022

			Expenditure in report year £m						Cumulative expenditure on schemes completed in the report year £m						
			Water Network+						Water Network+						
Line description	Units	DPs	Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	Water resources	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total	RAG 4 reference
Major project operating expenditure by purpose															
Operating expenditure purpose – line 1	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.12
Operating expenditure purpose – line 2	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.13
Operating expenditure purpose – line 3	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.14
Operating expenditure purpose – line 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.15
Operating expenditure purpose – line 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.16
Operating expenditure purpose – line 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.17
Operating expenditure purpose – line 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.18
Operating expenditure purpose – line 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.19
Operating expenditure purpose – line 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.20
Operating expenditure purpose – line 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.21
Total major project operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4F.22

Capital expenditure

We have £nil return on this table for the reporting year following the guidance contained in ‘RAG 4.10 Guideline for the table definitions in the annual performance report’.

Operating expenditure

We have £nil return on this table for the reporting year, as per RAG 4.10, section 14.

Key

Input cell Calculation cell Copy cell

Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4G

Major project expenditure for wholesale wastewater by purpose for the 12 months ended 31 March 2022

Expenditure in report year £m													
			Wastewater Network+					Bioresources					
			Sewage collection			Sewage treatment and disposal	Sludge liquor treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	Total	RAG 4 reference	
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage								
Major project capital expenditure by purpose													
Capital expenditure purpose – line 1	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.1
Capital expenditure purpose – line 2	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.2
Capital expenditure purpose – line 3	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.3
Capital expenditure purpose – line 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.4
Capital expenditure purpose – line 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.5
Capital expenditure purpose – line 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.6
Capital expenditure purpose – line 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.7
Capital expenditure purpose – line 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.8
Capital expenditure purpose – line 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.9
Capital expenditure purpose – line 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.10
Total major project capital expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.11
Major project operating expenditure by purpose													
Operating expenditure purpose – line 1	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.12
Operating expenditure purpose – line 2	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.13
Operating expenditure purpose – line 3	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.14
Operating expenditure purpose – line 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.15
Operating expenditure purpose – line 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.16
Operating expenditure purpose – line 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.17
Operating expenditure purpose – line 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.18
Operating expenditure purpose – line 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.19
Operating expenditure purpose – line 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.20
Operating expenditure purpose – line 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.21
Total major project operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4G.22

Key

 Input cell  Calculation cell  Copy cell

Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4G – Continued

Major project expenditure for wholesale wastewater by purpose for the 12 months ended 31 March 2022

Cumulative expenditure on schemes completed in the report year £m												

Capital expenditure

We have £nil return on this table for the reporting year following the guidance contained in 'RAG 4.10 Guideline for the table definitions in the annual performance report'.

Operating expenditure

We have £nil return on this table for the reporting year, as per RAG 4.10, section 14.

Table 4H
Financial metrics for the 12 months ended 31 March 2022

Line description	Units	DPs	Current year	AMP to date	RAG 4 reference
Financial indicators					
Net debt	£m	3	5614.796		4H.1
Regulatory equity	£m	3	2,131.107		4H.2
Regulatory gearing	%	2	72.49%		4H.3
Post tax return on regulatory equity	%	2	0.79%		4H.4
RORE (return on regulatory equity)	%	2	1.14%	1.10%	4H.5
Dividend yield	%	2	2.47%		4H.6
Retail profit margin - Household	%	2	-2.37%		4H.7
Retail profit margin - Non household	%	2	0.16%		4H.8
Credit rating - Fitch	Text	n/a	n/a		4H.9
Credit rating - Moody's	Text	n/a	n/a		4H.10
Credit rating - Standard and Poor's	Text	n/a	A- (Stable)		4H.11
Return on RCV	%	2	3.43%		4H.12
Dividend cover	dec	2	-6.75		4H.13
Funds from operations (FFO)	£m	3	444.861		4H.14
Interest cover (cash)	dec	2	3.79		4H.15
Adjusted interest cover (cash)	dec	2	1.96		4H.16
FFO/Net debt	dec	2	0.08		4H.17
Effective tax rate	%	2	29.73%		4H.18
Retained cash flow (RCF)	£m	3	392.302		4H.19
RCF/Net debt	dec	2	0.07		4H.20
Borrowings					
Proportion of borrowings which are fixed rate	%	2	50.78%		4H.21
Proportion of borrowings which are floating rate	%	2	-8.57%		4H.22
Proportion of borrowings which are index linked	%	2	57.79%		4H.23
Proportion of borrowings due within 1 year or less	%	2	7.28%		4H.24
Proportion of borrowings due in more than 1 year but no more than 2 years	%	2	5.39%		4H.25
Proportion of borrowings due in more than 2 years but no more than 5 years	%	2	6.79%		4H.26
Proportion of borrowings due in more than 5 years but no more than 20 years	%	2	65.13%		4H.27
Proportion of borrowings due in more than 20 years	%	2	15.41%		4H.28

Key

○ Input cell ● Calculation cell ● Copy cell

Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Financial metrics

4H.6: 'Dividend yield' is a calculated item linking to [Table 1A](#). Dividend yield of 2.5% (2020/2021: 2.8%) is lower than last year. The dividend has been paid in accordance with the Yorkshire Water dividend policy.

Lines 9 to 11: Credit ratings

Yorkshire Water Services Limited and its financing subsidiaries have credit ratings assigned to their issued debt by three rating agencies, Fitch Ratings (Fitch), Moody's Investors Service (Moody's) and S&P Global Ratings (S&P).

Yorkshire Water Services Limited and its financing subsidiaries have issued two types of debt: Class A and Class B - the main difference between the two is that the Class A lenders have more rights and also payment priority in the event of an unresolved Event of Default than Class B lenders. Fitch, Moody's and S&P periodically confirm and/or re-rate Class A debt and Class B debt credit ratings in the form of published notices.

The latest published ratings for Yorkshire Water Services Limited and its financing subsidiaries are shown in the table below (outlook status shown in brackets):

The credit rating reports for all three of the rating agencies that assign credit ratings to Yorkshire Water Services Limited and the other companies within the Yorkshire Water Financing Group can be found on our group website at:

Ofwat previously monitored Yorkshire Water's Moody's Corporate Family Rating and S&P's Class A Issue Rating. In May 2021, the Moody's Corporate Family Rating was withdrawn. Accordingly, the only rating that meets the definition for inputting into the table as at 31 March 2022 is the S&P Class A debt rating.

4H.13: The dividend cover ratio is negative due to the loss made in the year. The ratio for this year is negative 6.7 (2020/2021: positive 0.3) due to higher dividends paid per [Table 1A](#).16 and there being a loss made this year, compared to a profit in 2020/2021.

Rating Agency	Class A debt rating	Class B debt rating	Latest publication
Fitch	A- (stable)	BBB- (stable)	June 2021
Moody's	Baa2 (stable)	Ba1 (stable)	September 2021
S&P	A- (stable)	BBB (stable)	April 2021

4H.15: Interest cover (cash)

To calculate 4H.15, we have used the below formula as provide by Ofwat:

*Funds from operations (table 4H line 14)
plus interest paid on borrowings/Interest paid
on borrowings.*

Interest paid on borrowings is made up of the following:

	£m
Yorkshire Water Net Interest Paid (Table 1D Line 10 of the APR).	£112.8
Add back interest received on subordinated inter-company loans (see note 7 of Yorkshire Water Services Ltd annual report and financial statement for the year ended 31 March 2022).	£41.1
Add loan repayment from Yorkshire Water to fund interest payments on exchange bonds held by subsidiary companies to pay the interest on bonds raised by those subsidiary companies (see note 8 of Yorkshire Water Services Ltd annual report and financial statement for the year ended 31 March 2021 and further detail below).	£6.1
Interest Paid on Borrowings	£160.0

Certain bonds issued by subsidiaries of Yorkshire Water and subsequently on-lent to Yorkshire Water at their issue date had their terms changed in 2009. The changes involved exchanging the bonds with the bond holders for new bonds – resulting in changes to both their nominal value and applicable interest rates. ‘Exchange Accounting’ was applied by Yorkshire Water in relation to these bonds.

The difference in the pre and post exchange interest rates resulted in a funding gap between the interest payable on the original bonds and the actual interest payable at the new interest rates. These differences are covered by loans between Yorkshire Water and its subsidiary – Yorkshire Water Finance plc (YWF plc) whereby Yorkshire Water pays an amount over to YWF plc in order for the correct amount of interest to be paid to the bond holders. For the year ended 31 March 2022 this difference amounted to £6.1m. The associated loans will be repayable in full when the bonds mature.

The purpose of adding the £6.1m to the interest cost is to reflect the actual interest cost that Yorkshire Water and its subsidiaries have to pay to its external bond holders and therefore better reflects the actual interest attributable to Yorkshire Water.

Therefore, the calculation for line 15:
Interest cover (cash) is as follows:

$$\text{Interest cover (cash)} = (\text{£446.5m} + \text{£160.0m}) / \text{£160.0m} = 3.79 \text{ times.}$$

4H.16: Adjusted interest cover (cash)

We have used the formula in Ofwat’s guidance (which is different to the methodology used within our covenanted interest cover ratios and also the methodology used by the credit rating agencies) to calculate the adjusted interest cover (cash) in table 4H line 14. The formula is as follows:

$$(\text{Funds from operations (table 4H line 14) plus interest paid on borrowings less RCV run off}) / \text{Interest paid on borrowings.}$$

Interest paid on borrowings is as per line 15 – Interest cover (cash). RCV run off is defined within Yorkshire Water’s final determination and is adjusted to the year-end price base. The RCV run off figures are published by Ofwat each year.

Therefore, the calculation for line 16:
Adjusted interest cover (cash) is as follows:

$$(\text{£446.5m} + \text{£160.0m} - \text{£293.1m}) / \text{£160.0m} = 1.96 \text{ times}$$

4H.21-28: Borrowings

Yorkshire Water has a balanced mix of funding at fixed, floating and inflation linked interest rates. Yorkshire Water assesses debt portfolio exposures including derivatives. The reported proportion of index linked debt is 57.8% and reflects the position including the consideration of derivatives. If derivatives were not considered, then the company’s index linked exposure would be 35.0%.

Yorkshire Water’s debt maturity profile reflects the company’s effective management of its refinancing requirements.

Yorkshire Water measures its debt percentages against the company’s regulated capital value to ensure that no more than 20 per cent of the company’s refinancing requirements fall due within any 24-month period and that no more than 40 per cent falls due within any AMP.

The proportion of borrowings due within 1 year or less is 7.28% (2020/2021: 3.92%). Yorkshire Water raised £350m of new debt in April 2021. Other movements to the proportion of borrowings due, reflects the reducing maturity of existing debt.

Table 4I
Financial derivatives

	Nominal value by maturity (net) at 31 March				Total value at 31 March			Interest rate (weighted average for 12 months to 31 March 2021)		
Line description	0 to 1 years	1 to 2 years	2 to 5 years	Over 5 years	Nominal value (net)	Mark to Market	Total accretion at 31 March	Payable	Receivable	RAG 4 reference
Units DPs	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	% 3	% 3	
Interest rate swap (sterling)										
Floating to fixed rate	0.000	0.000	0.000	45.000	45.000	15.603	0.000	6.033%	1.154%	4I.1
Floating from fixed rate	0.000	0.000	0.000	430.000	430.000	-17.945	0.000	2.389%	3.888%	4I.2
Floating to index linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000%	0.000%	4I.3
Floating from index linked	0.000	0.000	200.352	1,088.648	1,289.000	3,014.087	197.809	2.906%	5.127%	4I.4
Fixed to index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000%	0.000%	4I.5
Fixed from index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000%	0.000%	4I.6
Index-linked to index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000%	0.000%	4I.7
Total	0.000	0.000	200.352	1,563.648	1,764.000	3,011.745	197.809			4I.8
Foreign Exchange										
Cross currency swap USD	0.000	113.112	0.000	0.000	113.112	-23.103	0.000			4I.9
Cross currency swap EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.10
Cross currency swap YEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.11
Cross currency swap Other	0.000	33.800	0.000	0.000	33.800	4.737	0.000			4I.12
Total	0.000	146.912	0.000	0.000	146.912	-18.366	0.000			4I.13
Currency interest rate										
Currency interest rate swaps USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.14
Currency interest rate swaps EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.15
Currency interest rate swaps YEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.16
Currency interest rate swaps Other	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.17
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000			4I.18

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4I – Continued
Financial derivatives

	Nominal value by maturity (net) at 31 March				Total value at 31 March			Interest rate (weighted average for 12 months to 31 March 2021)	RAG 4 reference	
Line description	0 to 1 years	1 to 2 years	2 to 5 years	Over 5 years	Nominal value (net)	Mark to Market	Total accretion at 31 March	Payable		Receivable
Units DPs	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	% 3		% 3
Forward currency contracts										
Forward currency contracts USD	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.19	
Forward currency contracts EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.20	
Forward currency contracts YEN	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.21	
Forward currency contracts CAD	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.22	
Forward currency contracts AUD	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.23	
Forward currency contracts HKD	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.24	
Forward currency contracts Other	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.25	
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000		4I.26	
Other financial derivatives										
Other financial derivatives	0.000	0.000	0.000	0.000	0.000	-47.001	0.000		4I.27	
Total financial derivatives	0.000	146.912	200.352	1,563.648	1,910.912	2,946.378	197.809		4I.28	

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4I provides an analysis of Yorkshire Water's portfolio of financial derivatives.

Yorkshire Water's operations expose the company to a variety of financial risks that include inflation risk, interest rate risk and exchange rate risk.

Yorkshire Water has several financial derivatives, including cross currency swaps and interest rate swaps, to manage the interest rate and currency risk arising from the debt instruments that are used to finance the company's activities.

Until 31 March 2020, Yorkshire Water's revenues were closely linked to the underlying rate of inflation measured by the retail price index (RPI) and fluctuated in line with changes in RPI. From 1 April 2020, a portion of Yorkshire Water's revenues have been linked to the rate of inflation measured by the consumer price index including owner-occupiers' housing costs (CPIH) and therefore is subject to fluctuations in line with changes in both RPI and CPIH.

Similarly, these changes impact the indexation of Yorkshire Water's RCV and the allowed return that can be recovered from customers. The percentage of the company's net debt to RCV is a covenant within Yorkshire Water's financing arrangements. In the absence of any management action, negative inflation could potentially lead to a breach of gearing limits, however, this risk is mitigated by Yorkshire Water maintaining levels of inflation linked debt and being a counterparty to inflation linked swaps.

Interest received on inflation linked swaps was amended during the year ended 31 March 2022 from being based on the six-month London Interbank Offered Rate (LIBOR) to economically equivalent rates based on the Sterling Overnight Index Average (SONIA). Interest is paid at fixed amounts plus RPI. Movements in RPI are also applied to the nominal value of inflation linked debt and swaps to determine additional amounts to be paid either at maturity or during the life of some inflation linked swaps. Therefore, the impact of RPI reductions on income and RCV is mitigated by reduced interest charges and lower value of inflation linked debt used in calculating gearing as a percentage of RCV.

Similar amendments for the transition to SONIA were made to other swaps where LIBOR was used to calculate amounts payable or receivable at future settlement dates.

The inflation profile of Yorkshire Water's debt and swap portfolio continues to be reviewed following the conclusion of HM Treasury's consultation on reform to RPI methodology, and any changes would be expected to be made between 2025 and 2030.

Table 4I line notes

4I.1: In relation to managing interest rate risk Yorkshire Water holds £45.0m (2021: £45.0m) nominal value of legacy floating to fixed rate swaps.

4I.2: Also, in relation to managing interest rate risk, Yorkshire Water holds £430.0m (2021: £430.0m) nominal value of floating from fixed rate swaps.

4I.4: In relation to managing inflation risk, Yorkshire Water holds £1,289.0m (2021: £1,289.0m) nominal value of floating from index linked swaps (termed inflation linked swaps). Yorkshire Water's inflation linked swaps have the following cashflows:

- Six monthly interest is received by Yorkshire Water based on SONIA.
- Six monthly interest is paid by Yorkshire Water based at a fixed rate plus RPI.
- An RPI linked amount is also payable on maturity of the swaps or at certain predetermined dates over the duration of the swaps.
- A proportion of the swaps also receives six monthly interest amounts based on a margin over the SONIA based rate mentioned above.

The maturity dates of the company's portfolio of inflation linked swaps range from 2026 to 2063.

At 31 March 2022, swaps with a total nominal value of £292.5m included Mandatory Break clauses in their terms. The dates for these Mandatory Breaks are: 21 February 2025 (£23.4m), 21 February 2028 (£110.2m), 21 August 2030 (£117.5m), and 21 February 2033 (£41.3m).

4I.9: In relation to managing currency risk, Yorkshire Water hedges the fair value of issued US dollar private placement notes using a series of combined interest rate and foreign currency swaps, swapping US dollar principal repayments into sterling and fixed rate US dollar interest payments into floating rate sterling interest payments.

4I.12: Yorkshire Water also hedges the fair value of an Australian dollar bond using a combined interest rate and foreign currency swap, swapping Australian dollar principal repayments into sterling and fixed rate Australian dollar interest payments into floating rate sterling interest payments.

4I.27: Other financial derivatives relate to Yorkshire Water's exposure to energy price fluctuations. Yorkshire Water aims to manage this risk by fixing energy contract prices where possible and operating within an energy purchasing policy that is designed to manage price volatility risk. The notional amounts of energy that Yorkshire Water has hedged is in megawatts per hour (i.e. not in £m's) and therefore the nominal value by maturity has been left blank in line 4I.27.

All other data items within [Table 4I](#) are a zero input.

Data validation

Within the statement of financial position at [Table 1C](#), in accordance with generally accepted accounting principles, financial derivatives are stated at fair value rather than the mark to market value. The fair value of a swap is essentially the mark to market value of the swap adjusted to consider the potential impact of the risk of swap counterparties defaulting (the counterparties being Yorkshire Water and the bank or financial institution providing the swap) as well as several other valuation adjustments.

[Table 4I](#) requests information on swap mark to market values rather than swap fair values. The table below reconciles the mark to market values shown in [Table 4I](#) to the fair value amounts shown within [Table 1C](#), the latter being reflected within Yorkshire Water's published financial statements.

Table 4I to table 1C reconciliation

Derivative type	Table 4I – mark to market values – liabilities shown as negative and assets shown as positive £m	Valuation adjustment to reflect the day 1 loss/gain on exchange transaction on exchanged swaps in line with IFRS accounting £m	Credit risk and other adjustments required under FRS102 accounting £m	Table 1C £m
Floating to fixed rate	(15.603)		0.888	(14.715)
Floating from fixed rate	17.945		(0.681)	17.264
Floating from index linked	(3014.087)	76.099	455.959	(2482.029)
Cross currency swap USD	23.103		(0.211)	22.892
Cross currency swap Other	(4.737)		0.035	(4.702)
Other financial derivatives	47.001		(0.104)	46.897
Total	(2946.378)	76.099	533.886	(2414.393)

Table 1C	£m
Non-current assets: Financial instruments	172.156
Current assets: Financial instruments	44.324
Non-Current liabilities: Financial instruments	(2630.873)
Total	(2414.393)

Mark to market value

The mark to market value is the net present value of all future expected receipts and payments under a swap. The amount is based on the current market expectations of future interest rates, future inflation rates and future exchange rates depending on the swap in question. Out-of-the-money (liability) positions are presented as positive, in-the-money (asset) positions are presented as negative. This signage convention is reversed in the [Table 4I](#) to [Table 1C](#) reconciliation presented above.

Technical notes

Nominal value

The Nominal value is the face amount that is used to calculate all payments made and received under the associated swap.


Interest rates

Interest rates payable and receivable for floating legs of derivatives have been determined using SONIA at 31 March 2022.

Table 4J**Base expenditure analysis for the 12 months ended 31 March 2022 – water resources and water Network+**

				Water Network+					
Line description	Units	DPs	Water resources	Raw water distribution	Raw water storage	Water treatment	Treated water distribution	Total	RAG 4 reference
Operating expenditure									
Power	£m	3	3.169	6.122	0.164	12.640	15.575	37.670	4J.1
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4J.2
Bulk Supply/Bulk discharge	£m	3	3.979	0.000	0.000	0.000	0.004	3.983	4J.3
Renewals expensed in year (infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4J.4
Renewals expensed in year (non-infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4J.5
Other operating expenditure	£m	3	10.559	2.779	1.577	50.395	100.385	165.695	4J.6
Local authority and Cumulo rates	£m	3	7.968	2.014	0.865	1.075	29.478	41.400	4J.7
Service Charges									
Canal & River Trust abstraction charges/discharge consents	£m	3	0.438	0.000	0.000	0.000	0.000	0.438	4J.8
Environment Agency/NRW abstraction charges/discharge consents	£m	3	5.082	0.000	0.000	0.250	0.000	5.332	4J.9
Other abstraction charges/discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4J.10
Location specific costs & obligations									
Costs associated with Traffic Management Act	£m	3	0.000	0.000	0.000	0.000	3.449	3.449	4J.11
Costs associated with lane rental schemes	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4J.12
Statutory water softening	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	4J.13
Total base operating expenditure	£m	3	31.195	10.915	2.606	64.360	148.891	257.967	4J.14
Capital expenditure									
Maintaining the long term capability of the assets - infra	£m	3	13.506	2.307	0.000	0.079	51.431	67.323	4J.15
Maintaining the long term capability of the assets - non-infra	£m	3	4.849	0.227	0.263	29.328	28.703	63.370	4J.16
Total base capital expenditure	£m	3	18.355	2.534	0.263	29.407	80.134	130.693	4J.17
Traffic Management Act									
Projects incurring costs associated with Traffic Management Act	nr	0	0	0	0	0	21430	21430	4J.18

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Capital expenditure

A total of £130.7m has been invested in maintaining the long-term capability of our water assets in the current report year. The above table identifies the split of this investment between each of the price controls as well as by infrastructure investment of £67.3m and non-infra £63.4m.

The total of £67.3m water infra base investment is split between the Water Resources price control £13.5m and the Water Network+ price control £53.8m.

The total £63.4m of water non-infra base investment is split between the Water Resources price control £4.8m and the Water Network+ price control £58.5m.

Water Resources investment of £18.4m includes £15.5m of directly allocated investment and £2.9m associated with its reallocation of Management and General costs apportioned across the whole programme.

Water Network+ investment of £112.3m includes £90.5m of directly allocated investment and £21.8m associated with its reallocation of Management and General costs apportioned across the whole programme.

Operating expenditure

Table 4J splits out the base expenditure in 4D. For more information on year on year variances refer to the commentary for [Table 4D](#).

Costs associated with the Traffic Management Act have decreased by £0.8m from 2021/2022, in line with permitting requirements.

Table 4K

Base expenditure analysis for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources

Line description	Units	DPs	Expenditure in report year						RAG 4 reference
			Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment		
Operating expenditure									
Power	£m	3		1.801	2.516	1.081	37.068	0.272	4K.1
Income treated as negative expenditure	£m	3		0.000	0.000	0.000	0.000	0.000	4K.2
Bulk Supply/Bulk discharge	£m	3		0.000	0.000	0.000	0.000	0.000	4K.3
Renewals expensed in year (infrastructure)	£m	3		0.000	0.000	0.000	0.000	0.000	4K.4
Renewals expensed in year (non-infrastructure)	£m	3		0.000	0.000	0.000	0.000	0.000	4K.5
Other operating expenditure	£m	3		26.561	23.190	19.300	49.503	-0.370	4K.6
Local authority and Cumulo rates	£m	3		0.083	0.102	0.119	16.700	0.003	4K.7
Service Charges									
Canal & River Trust abstraction charges/discharge consents	£m	3		0.000	0.000	0.293	0.000	0.000	4K.8
EA/NRW abstraction charges/discharge consents	£m	3		1.064	1.173	0.471	3.146	0.000	4K.9
Other abstraction charges/discharge consents	£m	3		0.000	0.000	0.000	0.000	0.000	4K.10
Location specific costs & obligations									
Costs associated with Traffic Management Act	£m	3		0.065	0.071	0.030	0.000	0.000	4K.11
Costs associated with lane rental schemes	£m	3		0.000	0.000	0.000	0.000	0.000	4K.12
Costs associated with industrial emissions directive	£m	3		0.000	0.000	0.000	0.000	0.000	4K.13
Total base operating expenditure	£m	3		29.574	27.052	21.294	106.417	-0.095	4K.14
Capital expenditure									
Maintaining the long term capability of the assets - infra	£m	3		37.096	26.300	9.905	0.715	0.000	4K.15
Maintaining the long term capability of the assets - non-infra	£m	3		15.864	10.725	4.313	61.489	0.217	4K.16
Total base capital expenditure	£m	3		52.960	37.025	14.218	62.204	0.217	4K.17
Traffic Management Act									
Projects incurring costs associated with Traffic Management Act	nr	0		317	349	146	0	0	4K.18
Operating expenditure (AMP 7 shadow reported values)									
Power	£m	3		0.000	0.000	0.000	9.412	0.000	4K.19
Income treated as negative expenditure	£m	3		0.000	0.000	0.000	0.000	0.000	4K.20

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4K – Continued

Base expenditure analysis for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources

Line description	Units	DPs	Expenditure in report year				RAG 4 reference
			Bioresources			Total	
			Sludge Transport	Sludge Treatment	Sludge Disposal		
Operating expenditure							
Power	£m	3	0.004	-5.463	0.001	37.280	4K.1
Income treated as negative expenditure	£m	3	0.000	-2.426	0.000	-2.426	4K.2
Bulk Supply/Bulk discharge	£m	3	0.000	0.000	0.000	0.000	4K.3
Renewals expensed in year (infrastructure)	£m	3	0.000	0.000	0.000	0.000	4K.4
Renewals expensed in year (non-infrastructure)	£m	3	0.000	0.000	0.000	0.000	4K.5
Other operating expenditure	£m	3	7.602	18.093	9.165	153.044	4K.6
Local authority and Cumulo rates	£m	3	0.006	1.432	0.001	18.446	4K.7
Service Charges							
Canal & River Trust abstraction charges/discharge consents	£m	3	0.000	0.000	0.000	0.293	4K.8
EA/NRW abstraction charges/discharge consents	£m	3	0.000	0.000	0.028	5.882	4K.9
Other abstraction charges/discharge consents	£m	3	0.000	0.000	0.000	0.000	4K.10
Location specific costs & obligations							
Costs associated with Traffic Management Act	£m	3	0.000	0.000	0.000	0.166	4K.11
Costs associated with lane rental schemes	£m	3	0.000	0.000	0.000	0.000	4K.12
Costs associated with industrial emissions directive	£m	3	0.000	0.000	0.000	0.000	4K.13
Total base operating expenditure	£m	3	7.612	11.636	9.195	212.685	4K.14
Capital expenditure							
Maintaining the long term capability of the assets - infra	£m	3	0.000	0.000	0.000	74.016	4K.15
Maintaining the long term capability of the assets - non-infra	£m	3	0.287	13.246	1.625	107.766	4K.16
Total base capital expenditure	£m	3	0.287	13.246	1.625	181.782	4K.17
Traffic Management Act							
Projects incurring costs associated with Traffic Management Act	nr	0	0	0	0	812	4K.18
Operating expenditure (AMP 7 shadow reported values)							
Power	£m	3	0.000	0.000	0.000	9.412	4K.19
Income treated as negative expenditure	£m	3	0.000	-9.412	0.000	-9.412	4K.20

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Capital expenditure

A total of £166.6m has been invested in maintaining the long-term capability of our wastewater assets in the current report year. The above table identifies the split of this investment between each of the price controls as well as by infrastructure investment of £74.0m and non-infra £92.6m.

Further detail on the areas of spend and the improvements the overall wastewater base investment will deliver can be found in the commentary for [Table 4E](#).

The total of £73.8m wastewater infra base investment is split between the Network+ Sewage Collection £73.1m and Network+ Sewage Treatment £0.7m.

The total £92.6m of wastewater non-infra base investment is split between the Network+ Sewage collection £30.9m, Network+ Sewage treatment £61.7m

Investment of £104.0m within the Network+ Sewage Collection price control is split between £92.3m of investment that is directly allocated, with the remaining £11.7m associated with its reallocation of Management and General costs apportioned across the whole programme.

Investment of £62.4m within the Network+ Sewage Treatment price control is split between £52.6m of investment that is directly, with the remaining £9.7m associated with its reallocation of Management and General costs apportioned across the whole programme.

Investment of £15.2m within the Bioresources price control is split between £12.6m of investment that is directly allocated, with the remaining £2.5m associated with its reallocation of Management and General costs apportioned across the whole programme.

Operating expenditure

Table 4K splits out the base expenditure in [Table 4E](#). For more information on year on year variances refer to the commentary for [Table 4E](#).

Costs associated with Traffic Management Act compliance are in line with previous years.

This year for [Table 4K](#) there is a requirement to shadow report the cost to wastewater Network+ of purchasing energy from bioresources, as well as to report income received by the bioresources price control associated with this transfer. As per the guidance in RAG 2, the price used is the price to purchase energy from the national electricity/ gas network (the grid).

Table 4L

Enhancement expenditure for the 12 months ended 31 March 2022 – water resources and water Network+

Due to the size of the data table, we have published Table 4L separately on our website here:

Capital expenditure

The water Network+ enhancement capital expenditure in the current report year totals £25.8m against a final determination of £35.5m. There is £24.1m of direct allocation and £1.7m associated with its reallocation of Management and General costs apportioned across the whole programme.

The water resources enhancement capital expenditure in the current report year totals £4.7m against a final determination of £3.7m. There is £4.6m of direct allocation and £0.1m associated with its reallocation of Management and General costs apportioned across the whole programme.

We have included 1 free-form line, 4L.76 – COVID-19 capital costs. This was created last year to show enhancement expenditure that was due to COVID-19 delays and was referenced as 4L.70. We have no costs assigned to here this year, however we shown the expenditure from last year within the cumulative column.

Regulatory obligations delivered within the reporting year

There were no regulatory obligations relating to our wholesale water resources and water Network+ programme due for completion within the reporting year. All AMP7 Water WINEP and DWI regulatory obligations are forecast to be completed before or in line with their corresponding compliance dates.

Operating expenditure

We have reported £nil Opex cost for enhancement expenditure as enhanced capital expenditure has just started. These costs are expected to increase through AMP 7.

Table 4M

Enhancement expenditure for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources

Due to the size of the data table, we have published Table 4M separately on our website here:

Capital expenditure

The wastewater Network+ enhancement capital expenditure in the current report year totals £59.2m against a final determination of £239.8m. There is £57.3m of direct allocation and £1.9m associated with its reallocation of Management and General costs apportioned across the whole programme.

The delay on spend in year 2 continues from year 1 as we drive the efficiencies that are required to deliver the WINEP and DWI quality programmes within the Final Determination funding, further work in ongoing, by our Strategic Planning Partner Stantec, to ensure that the best overall Totex solutions are promoted. Despite the delay we are confident that no regulatory compliance dates have been put at risk, as we are forecasting to meet corresponding regulatory dates.

The bioresources enhancement capital expenditure in the current report year totals £1.3m. There is £1.0m of direct allocation and £0.3m associated with its reallocation of Management and General costs apportioned across the whole programme.

Regulatory obligations delivered within the reporting year

We have achieved 361 regulatory outputs within the year. All AMP7 Water WINEP and DWI regulatory obligations are forecast to be completed before or in line with their corresponding compliance dates.

Operating expenditure

There are minimal Opex cost for enhancement expenditure as enhanced capital expenditure has just started. These costs are expected to increase during AMP 7.

Table 4N**Developer services expenditure for the 12 months ended 31 March 2022 – water Network+ (price control)**

			Water Network+			RAG 4 reference
			Treated water distribution			
Line description	Units	DPs	Capex	Opex	Totex	
New connections	£m	3	8.293	0.000	8.293	4N.1
Requisition mains	£m	3	7.126	0.000	7.126	4N.2
Infrastructure network reinforcement	£m	3	5.865	0.000	5.865	4N.3
s185 diversions	£m	3	0.507	0.000	0.507	4N.4
Other price controlled activities	£m	3	0.000	0.000	0.000	4N.5
Total developer services expenditure	£m	3	21.791	0.000	21.791	4N.6

Capital expenditure

Developer services expenditure associated with the wholesale water programme in the current report year total £21.8m which is all reported in the above table under the Water Network+ Treated water distribution price control.

Income totalling £17.7m has been received and reported within [Table 2E](#).

Operating expenditure

The majority of our developer services costs are of a capital nature and minimise the requirements for Opex costs.

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Table 40**Developer services expenditure for the 12 months ended 31 March 2022 – wastewater Network+ and bioresources**

				Wastewater Network+					
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Total	RAG 4 reference
Capex									
New connections	£m	3		0.000	0.000	0.000	0.000	0.000	4O.1
Requisition sewers	£m	3		1.054	0.191	0.010	0.000	1.255	4O.2
Infrastructure network reinforcement	£m	3		0.095	0.004	0.002	0.000	0.101	4O.3
s185 diversions	£m	3		1.503	1.544	0.593	0.000	3.640	4O.4
Other price controlled activities	£m	3		0.000	0.000	0.000	-0.091	-0.091	4O.5
Total total developer services capex	£m	3		2.652	1.739	0.605	-0.091	4.905	4O.6
Opex									
New connections	£m	3		0.000	0.000	0.000	0.000	0.000	4O.7
Requisition sewers	£m	3		0.000	0.000	0.000	0.000	0.000	4O.8
Infrastructure network reinforcement	£m	3		0.000	0.000	0.000	0.000	0.000	4O.9
s185 diversions	£m	3		0.000	0.000	0.000	0.000	0.000	4O.10
Other price controlled activities	£m	3		0.000	0.000	0.000	0.000	0.000	4O.11
Total developer services opex	£m	3		0.000	0.000	0.000	0.000	0.000	4O.12
Totex									
Total developer services expenditure	£m	3		2.652	1.739	0.605	-0.091	4.905	4O.13

Capital expenditure

Developer services expenditure associated with the wholesale wastewater programme in the current report year total £4.9m which is all reported in the above table under the Wastewater Network+ price control.

Income totalling £9.3m has been received and reported within [Table 2E](#).

Operating expenditure

The majority of our developer services costs are of a capital nature and minimise the requirements for Opex costs. Yorkshire Water does not undertake the laying and construction of sewer connections, as we do not exercise our powers under S107. Therefore, line 4O.7 to 4O.12 is a nil return.

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Table 4P

Expenditure on non-price control diversions for the 12 months ended 31 March 2022

Line description	Units	DPs	Water resources	Water Network+	Wastewater Network+	Total	RAG 4 reference
Totex							
Costs associated with NSWRA diversions	£m	3	0.000	2.056	7.357	9.413	4P.1
Costs associated with other non-price control diversions	£m	3	0.000	0.000	0.000	0.000	4P.2
Other developer services non-price control totex	£m	3	0.000	0.000	0.000	0.000	4P.3
Developer services non-price control totex	£m	3	0.000	2.056	7.357	9.413	4P.4

Capital Expenditure

Expenditure on non-price control diversions with the wholesale programme in the current report year totals £9.4m, of which £2.1m is within the Water Network+ price control and £7.4m within Wastewater Network+ price control.

All investment is associated with requests to divert our assets as part of NRSWA (New Roads and Street Works Act 1991) requests for which no capital allowance was made within the FD but income totalling £5.8m (split between Water £1.5m and Wastewater £4.4m) has been received and reported within [Table 2E](#).

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4Q**Developer services – New connections, properties and mains**

Line description	Units	DPs	Water	Wastewater	Total	RAG 4 reference
Connections volume data						
New connections (residential – excluding NAVs)	nr	0	9947	11346	21293	4Q.1
New connections (business – excluding NAVs)	nr	0	532	1217	1749	4Q.2
Total new connections served by incumbent	nr	0	10479	12563	23042	4Q.3
New connections – SLPs	nr	0	3803			4Q.4
Properties volume data						
New properties (residential – excluding NAVs)	nr	0	12045	9094	21139	4Q.5
New properties (business – excluding NAVs)	nr	0	903	927	1830	4Q.6
Total new properties served by incumbent	nr	0	12948	10021	22969	4Q.7
New residential properties served by NAVs	nr	0	1116	0	1116	4Q.8
New business properties served by NAVs	nr	0	2	2	4	4Q.9
Total new properties served by NAVs	nr	0	1118	2	1120	4Q.10
Total new properties	nr	0	14066	10023	24089	4Q.11
New properties – SLP connections	nr	0	3803			4Q.12
New water mains data						
Length of new mains (km) – requisitions	nr	0	43			4Q.13
Length of new mains (km) – SLPs	nr	0	40			4Q.14

4Q.1 to 4Q.11 displays our total new connections and new property volumes split between Water and Wastewater. It is important to note that our connection volume to property volume isn't always a 1 to 1 ratio, as one connection on our network could serve multiple properties. This means that our property count, displayed in 4Q.11 is higher than our connection count in 4Q.3.

Our volumes were severely reduced during 2020/2021 due to the impacts COVID-19 had on our development and construction work. The 2021/2022 volumes have increased as we returned to normal ways of working, only slightly impacted by COVID-19 in the early months of the year.

Mainlaying, as reported in 4Q.13 & 4Q.14, also saw a return to normal volumes during 2021/2022, seeing an 12% increase compared to 2020/2021 which was also significantly impacted by COVID-19.

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Table 4R
Connected properties, customers and population

Line description	Units	DPs	Unmeasured	Measured	Total	Voids	RAG 4 reference			
Customer numbers - average during the year										
Residential water only customers	000s	3		53.491	59.209	112.700	4.258	4R.1		
Residential wastewater only customers	000s	3		57.412	63.508	120.920	4.507	4R.2		
Residential water and wastewater customers	000s	3		832.558	1186.774	2019.332	79.657	4R.3		
Total residential customers	000s	3		943.461	1309.491	2252.952	88.422	4R.4		
Business water only customers	000s	3		0.877	23.236	24.113	2.570	4R.5		
Business wastewater only customers	000s	3		2.003	3.867	5.871	1.685	4R.6		
Business water & wastewater customers	000s	3		12.324	81.225	93.549	19.462	4R.7		
Total business customers	000s	3		15.204	108.328	123.532	23.717	4R.8		
Total customers	000s	3		958.665	1417.819	2376.484	112.139	4R.9		
	Water				Wastewater					
Line description	Units	DPs	Un-measured	Measured	Total	Un-measured	Measured	Total	RAG 4 reference	
Property numbers - average during the year										
Residential properties billed	000s	3		886.049	1245.983	2132.032	889.970	1250.282	2140.252	4R.10
Residential void properties	000s	3				83.915			84.164	4R.11
Total connected residential properties	000s	3				2215.947			2224.416	4R.12
Business properties billed	000s	3		13.200	104.461	117.660	14.327	85.092	99.419	4R.13
Business void properties	000s	3				22.032			21.147	4R.14
Total connected business properties	000s	3				139.692			120.566	4R.15
Total connected properties	000s	3				2355.639			2344.982	4R.16

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Table 4R – Continued
Connected properties, customers and population

			Water																		
			Unmeasured						Measured						Unbilled						
Line description	Units	DPs	No meter	Basic meter	AMR meter	AMI meter (capable)	AMI meter (active)	Total	No meter	Basic meter	AMR meter	AMI meter (capable)	AMI meter (active)	Total	Un-economic to bill	Other	Total	Total	RAG 4 reference		
Property and meter numbers – at end of year (31 March)																					
Total new residential properties connected in year	000s	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.073	0.000	0.000	15.073				15.073	4R.17		
Total number of new business properties connections	000s	3	0.073	0.000	0.000	0.000	0.000	0.073	0.000	0.041	0.484	0.000	0.000	0.525				0.598	4R.18		
Residential properties billed at year end	000s	3	878.464	0.089	3.495	0.000	0.000	882.048	0.000	139.769	1119.548	0.754	0.000	1260.071				2142.119	4R.19		
Residential properties unbilled at year end	000s	3													0.000	0.000	0.000	0.000	4R.20		
Residential void properties at year end	000s	3							39.730							41.810				81.540	4R.21
Total connected residential properties at year end	000s	3							921.778							1301.881				2223.659	4R.22
Business properties billed at year end	000s	3	13.175	0.042	0.001	0.000	0.000	13.218	0.008	29.666	74.161	0.000	0.650	104.485				117.703	4R.23		
Business properties unbilled at year end	000s	3													0.000	0.284	0.284	0.284	4R.24		
Business void properties at year end	000s	3							5.412							16.381				21.793	4R.25
Total connected business properties at year end	000s	3							18.630							120.866				139.780	4R.26
Total connected properties at year end	000s	3							940.408							1422.747				2363.439	4R.27

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Table 4R – Continued

Connected properties, customers and population

Line description	Units	DPs	Water	Wastewater	RAG 4 reference
Population data					
Resident population	000s	3	5409.807	5244.666	4R.28
Non-resident population (wastewater)	000s	3		26.334	4R.29

			Water			RAG 4 reference
Line description	Units	DPs	Resident population	Non-resident population	Total	
Household population data						
Household population	000s	3	5325.796	0.000	5325.796	4R.30
Household measured population (water only)	000s	3	2919.458	0.000	2919.458	4R.31
Household unmeasured population (water only)	000s	3	2406.338	0.000	2406.338	4R.32

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 4R shows non-financial data in relation to connected properties, customers and population.

Data items **4R.1** to **4R.27** show the customer, property and meter volumes for our residential and business customer base. Overall, our reported values are in line with expectations, with volumes increasing as we return to normal ways of working following COVID-19. We are also pleased to say our void volumes have reduced when compared to 2020/2021 as a result of an increased level of focus.

Resident Population (4R.28): 2021/2022 is reported at 5,409,807. This is in line with a recent ONS population estimate for Yorkshire and The Humber (source June 2021) – 5,526,350.

Note, the geographic areas are not identical and so the ONS data can only be used as a guide.

It is well documented that the COVID-19 pandemic has made demographic analysis more challenging. It is not yet clear how changes in demographic behaviour since the start of the COVID-19 pandemic have materialised in short-term demographics, nor how they will translate into long-term demographic trends.

As a result, looking at longer-term trends, the total reported water residential population has increased by almost a quarter of a million people (c.4.7%) since 2017/2018. Some change is due to improvements in our reporting:

- using an annual update of occupancy which is therefore more accurate and does not rely on 10-year census estimates, and
- inclusion of an estimate of the 'hidden and transient' population (adds c.75,000 people).

The average increase is in line with ONS data from a similar period, see

Example population growth rates by local authority, 2014–2019:

- Urban-dominated (most of Yorkshire's population)
 - Selby +5.8%
 - Leeds +3.6%
 - Wakefield +5.0%
 - Barnsley +3.7%

- Rural dominated
 - East Riding of Yorkshire +1.2%
 - Ryedale +4.8%
 - Harrogate +0.8%

Non-resident population (4R.29):

The Non-resident population (or holiday and tourist population) has significantly changed when compared to the previous four years. This is because there was no available data on impact of COVID-19, so the same Non-resident population was reported for the previous four years. We have developed our reporting process for this measure and Edge Analytics were employed to specifically investigate this aspect.

This reduction was attributed largely to a decrease in foreign night visitors, but all aspects of the non-resident population were affected:

"Since early 2020, the COVID-19 pandemic has continued to have a profound effect on all aspects of UK society. The social and economic disruption has resulted in important changes to the UK's 'usually resident' population, in terms of the daily dynamics of work and higher education and day-to-day mobility. However, these important changes are similarly reflected in the UK's H&T populations, with changes to the arrival of short-term residents, the use of second homes, the mobility of domestic visitors, plus the constraints on international arrivals and departures": Edge Analytics Methodology Report.

Household population (4R.30): 2021/2022 has been estimated by multiplying average property numbers by occupancy rates for measured and unmeasured households and adding the estimated 'hidden and transient' population provided to Yorkshire Water by an external consultancy's analysis of ONS (Office of National Statistics) data. The occupancy rates used for the different household property categories are determined through an annual occupancy update of our billing database by an external demographics specialist company. 2021/2022 is estimated at 5,325,794.508. This figure is used when calculating our customers' annual per capita consumption (PCC). 4R.31 and 4R.32 shows how this is broken down between measured and unmeasured.

Table 5: Additional regulatory information – water resources

Introduction

The information in this section details 'Additional regulatory information- water resources' as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables:

[Pro forma 5A](#) Water resources asset and volumes data for the 12 months ended 31st March 2022

[Pro forma 5B](#) Water resources operating cost analysis for the 12 months ended 31st March 2022



Table 5A**Water resources asset and volumes data for the 12 months ended 31 March 2022**

Line description	Units	DPs	Input	RAG 4 reference
Water resources				
Water from impounding reservoirs	MI/d	2	563.51	5A.1
Water from pumped storage reservoirs	MI/d	2	6.11	5A.2
Water from river abstractions	MI/d	2	490.73	5A.3
Water from groundwater works,excluding managed aquifer recharge (MAR) water supply schemes	MI/d	2	278.75	5A.4
Water from artificial recharge (AR) water supply schemes	MI/d	2	0.00	5A.5
Water from aquifer storage and recovery (ASR) water supply schemes	MI/d	2	0.00	5A.6
Water from saline abstractions	MI/d	2	0.00	5A.7
Water from water reuse schemes	MI/d	2	0.00	5A.8
Number of impounding reservoirs	nr	0	39	5A.9
Number of pumped storage reservoirs	nr	0	4	5A.10
Number of river abstractions	nr	0	16	5A.11
Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	nr	0	40	5A.12
Number of artificial recharge (AR) water supply schemes	nr	0	0	5A.13
Number of aquifer storage and recovery (ASR) water supply schemes	nr	0	0	5A.14
Number of saline abstraction schemes	nr	0	0	5A.15
Number of reuse schemes	nr	0	0	5A.16
Total number of sources	nr	0	99	5A.17
Total number of water reservoirs	nr	0	116	5A.18
Total volumetric capacity of water reservoirs	MI	0	185168	5A.19
Total number of intake and source pumping stations	nr	0	80	5A.20
Total installed power capacity of intake and source pumping stations	kW	0	12597	5A.21
Total length of raw water abstraction mains and other conveyors	km	2	56.60	5A.22
Average pumping head – raw water abstraction	m.hd	2	12.48	5A.23
Energy consumption – water resources (MWh)	MWh	3	63,144.443	5A.24
Total number of raw water abstraction imports	nr	0	1	5A.25
Water imported from 3rd parties to raw water abstraction systems	MI/d	2	0.00	5A.26
Total number of raw water abstraction exports	nr	0	0	5A.27
Water exported to 3rd parties from raw water abstraction systems	MI/d	2	0.00	5A.28
Water resources capacity (measured using water resources yield)	MI/d	2	1656.92	5A.29

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5A.1-4: We have 111 abstraction licences authorising abstraction from sources across the Yorkshire region. We are required to report the quantities abstracted annually to the Environment Agency for the financial reporting year in April. The reported data to the Environment Agency informs these lines.

We only abstract water from impounding reservoirs, pumped storage reservoirs, rivers and groundwater. We have one aquifer storage and recovery (ASR) scheme abstraction licence at Loftsome Bridge, this was an experimental scheme and has not been actively used for several years. We do not take any water from artificial recharge, saline or reuse schemes.

The below table shows how these items have trended over the previous four years:

Line No	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
5A.1 Impounding reservoirs	509.21	555.32	583.58	563.51
5A.2 Pumped storage reservoirs	5.54	6.30	7.73	6.11
5A.3 Rivers	538.57	455.84	453.01	490.73
5A.4 Groundwater	266.40	264.33	274.23	278.75

5A.9-17: There has been one increase in 'pumped storage' compared to 2020/2021 which was the addition of Tophill Low, located north of Hull in the East Riding of Yorkshire. The below table shows how our reported values have trended over the previous four years:

Line No	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
5A.9 No of sources of impounding reservoirs	39	40	39	39
5A.10 Pumped storage reservoirs	3	2	3	4
5A.11 River abstractions	9	16	16	16
5A.12 Groundwater	40	40	40	40
5A.17 Total	91	98	98	99

5A.18 & 19: The below table shows how these items have trended over the past four years:

Line No	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
5A.18 No of reservoirs	130	129	116	116
5A.19 Capacity of reservoirs	187926	187719	183496	185168

5A.22: To improve accuracy of reporting, we have been validating our estimated mains lengths with local site operators. All except one of the water resources mains have now been validated (Elvington RI to Elvington RPS). This validation process has resulted in a reduction in our reported 2021/2022 volume compared to 2020/2021:

Line No	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
5A.22 raw water abstraction mains	22.50	14.76	73.93	56.60

5A.23: For 2021/2022, there are some estimates built into the calculation and, over the last 12 months we have been working towards implementing a new methodology which would improve the accuracy of our average pumping head data (APH). Below shows the trend of this reported data.

Line No	2018/ 2019	2019/ 2020	2020/ 2021	2021/ 2022
5A.23 APH - raw water abstraction (m.hd)	11.45	10.10	10.41	12.48

Table 5B**Water resources operating cost analysis for the 12 months ended 31 March 2022**

Line description	Units	DPs	Impounding Reservoir	Pumped Storage	River Abstractions	Ground-water, excluding MAR water supply schemes	Artificial Recharge (AR) water supply schemes	Aquifer Storage and Recovery (ASR) water supply schemes	Other	Total	RAG 4 reference
Power	£m	3	0.095	0.009	0.156	2.909	0.000	0.000	0.000	3.169	5B.1
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5B.2
Abstraction charges/discharge consents	£m	3	4.015	0.000	0.003	1.502	0.000	0.000	0.000	5.520	5B.3
Bulk supply	£m	3	3.979	0.000	0.000	0.000	0.000	0.000	0.000	3.979	5B.4
Other operating expenditure											
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5B.5
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5B.6
Other operating expenditure excluding renewals	£m	3	8.522	0.000	0.004	2.034	0.000	0.000	0.000	10.560	5B.7
Local authority and Cumulo rates	£m	3	6.852	0.000	0.002	1.113	0.000	0.000	0.000	7.967	5B.8
Total operating expenditure (excluding 3rd party)	£m	3	23.463	0.009	0.165	7.558	0.000	0.000	0.000	31.195	5B.9

This table is a further disaggregation of water resources data contained within [Table 4D](#) and reconciles to line 4.

To allocate these costs, all relevant assets were classified according to the tables in line with RAG 4.10.

Total operating costs for water resources price control have increased in 2021/2022. For more information on year on year variances refer to the commentary for [Table 4D](#).

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 6:

Additional

regulatory

information –

water Network+

Introduction

The information in this section details 'Additional regulatory information– water Network+' as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables:

[Pro forma 6A](#) Raw water transport, raw water storage and water treatment data for the 12 months ended 31st March 2022

[Pro forma 6B](#) Treated water distribution – assets and operations for the 12 months ended 31st March 2022

[Pro forma 6C](#) Water Network+ – Mains, communication pipes and other data for the 12 months ended 31st March 2022

[Pro forma 6D](#) Demand management – Metering and leakage activities for the 12 months ended 31 March 2022

[Pro forma 6F](#) WRMP annual reporting on delivery – non-leakage activities

Table 6A

Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2022

Line description	Units	DPs	Input	RAG 4 reference	
Raw water transport and storage					
Total number of balancing reservoirs	nr	0	11	6A.1	
Total volumetric capacity of balancing reservoirs	MI	0	2153	6A.2	
Total number of raw water transport stations	nr	0	38	6A.3	
Total installed power capacity of raw water transport pumping stations	kW	0	27950	6A.4	
Total length of raw water transport mains and other conveyors	km	2	1412.21	6A.5	
Average pumping head – raw water transport	m.hd	2	22.00	6A.6	
Energy consumption – raw water transport (MWh)	MWh	3	46616.795	6A.7	
Total number of raw water transport imports	nr	0	1	6A.8	
Water imported from 3rd parties to raw water transport systems	MI/d	2	53.32	6A.9	
Total number of raw water transport exports	nr	0	1	6A.10	
Water exported to 3rd parties from raw water transport systems	MI/d	2	4.05	6A.11	
Total length of raw and pre-treated (non-potable) water transport mains for supplying customers	km	2	0.00	6A.12	
Water treatment – treatment type analysis					
	Surface water		Ground water		
	Water treated	Number of works	Water treated	Number of works	
Units DPs	MI/d 2	nr 0	MI/d 2	nr 0	RAG 4 reference
All simple disinfection works	0.00	0	0.00	0	6A.13
W1 works	0.00	0	0.00	0	6A.14
W2 works	0.00	0	64.69	14	6A.15
W3 works	429.33	13	29.76	3	6A.16
W4 works	203.37	7	90.43	5	6A.17
W5 works	393.34	7	74.13	1	6A.18
W6 works	0.00	0	0.00	0	6A.19
Water treatment – works size					
	% of total	Number of works			
Units DPs	DI 1	nr 0			
WTWs in size band 1	0.3	5	6A.20		
WTWs in size band 2	0.7	3	6A.21		
WTWs in size band 3	3.3	7	6A.22		
WTWs in size band 4	5.1	6	6A.23		
WTWs in size band 5	24.0	14	6A.24		
WTWs in size band 6	26.5	8	6A.25		
WTWs in size band 7	16.5	3	6A.26		
WTWs in size band 8	23.6	2	6A.27		

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 6A – Continued

Raw water transport, raw water storage and water treatment data for the 12 months ended 31 March 2022

Line description	Units	DPs	Input	RAG 4 reference
Water treatment – other information				
Total water treated at more than one type of works	MI/d	2	0.00	6A.28
Number of treatment works requiring remedial action because of raw water deterioration	nr	0	0	6A.29
Zonal population receiving water treated with orthophosphate	000's	3	5355.580	6A.30
Average pumping head – water treatment	m.hd	2	14.07	6A.31
Energy consumption – water treatment (MWh)	MWh	3	87453.451	6A.32
Total number of water treatment imports	nr	0	0	6A.33
Water imported from 3rd parties to water treatment works	MI/d	2	0.00	6A.34
Total number of water treatment exports	nr	0	0	6A.35
Water exported to 3rd parties from water treatment works	MI/d	2	0.00	6A.36

6A.1–12: This section of the data table displays our 'raw water transport and storage' values for 2021/2022. Other than a shift in volume in 6A.1 & 2 due to two reservoirs now reported within [Table 5](#), all figures are consistent with previous years.

6A.13–19: This data displays our 'water treatment – treatment type analysis' split by 'surface water' and 'ground water'. All the reported values within this section have remained consistent to our 2020/2021 volumes.

6A.20–27: This section of the data table displays our 'water treatment – works size'. Compared to 2020/2021, we saw the following movements:

- Sladen Valley WTW moved from band 3 to band 4.
- Fixby WTW moved from band 4 to band 5.
- Keldgate WTW moved from band 6 to band 7.

6A.28–36: These lines report our 'Water treatment – other information'. All our reportable figures within this section have seen small movements compared to 2020/2021 but still remain in line with business expectation. 6A.28, 33–36 show a nil return, which is consistent with last year.

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 6B**Treated water distribution – assets and operations for the 12 months ended 31 March 2022**

Line description	Units	DPs	Input	RAG 4 reference
Assets and operations				
Total installed power capacity of potable water pumping stations	kW	0	74058	6B.1
Total volumetric capacity of service reservoirs	MI	1	2855.5	6B.2
Total volumetric capacity of water towers	MI	1	28.9	6B.3
Distribution input	MI/d	2	1267.65	6B.4
Water delivered (non-potable)	MI/d	2	0.00	6B.5
Water delivered (potable)	MI/d	2	1052.93	6B.6
Water delivered (billed measured residential properties)	MI/d	2	352.76	6B.7
Water delivered (billed measured businesses)	MI/d	2	251.50	6B.8
Total annual leakage	MI/d	2	283.08	6B.9
Distribution losses	MI/d	2	211.19	6B.10
Water taken unbilled	MI/d	2	37.69	6B.11
Proportion of distribution input derived from impounding reservoirs	Propn 0 to 1	3	0.537	6B.12
Proportion of distribution input derived from pumped storage reservoirs	Propn 0 to 1	3	0.182	6B.13
Proportion of distribution input derived from river abstractions	Propn 0 to 1	3	0.012	6B.14
Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	Propn 0 to 1	3	0.269	6B.15
Proportion of distribution input derived from artificial recharge (AR) water supply schemes	Propn 0 to 1	3	0.000	6B.16
Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	Propn 0 to 1	3	0.000	6B.17
Proportion of distribution input derived from saline abstractions	Propn 0 to 1	3	0.000	6B.18
Proportion of distribution input derived from water reuse schemes	Propn 0 to 1	3	0.000	6B.19
Total number of potable water pumping stations that pump into and within the treated water distribution system	nr	0	501	6B.20
Number of potable water pumping stations delivering treated groundwater into the treated water distribution system	nr	0	23	6B.21
Number of potable water pumping stations delivering surface water into the treated water distribution system	nr	0	58	6B.22
Number of potable water pumping stations that re-pump water already within the treated water distribution system	nr	0	420	6B.23
Number of potable water pumping stations that pump water imported from a 3rd party supply into the treated water distribution system	nr	0	0	6B.24
Total number of service reservoirs	nr	0	399	6B.25
Number of water towers	nr	0	27	6B.26
Energy consumption – treated water distribution (MWh)	MWh	3	120549.732	6B.27
Average pumping head – treated water distribution	m.hd	2	66.11	6B.28
Total number of treated water distribution imports	nr	0	0	6B.29
Water imported from 3rd parties to treated water distribution systems	MI/d	2	0.00	6B.30
Total number of treated water distribution exports	nr	0	4	6B.31
Water exported to 3rd parties from treated water distribution systems	MI/d	2	0.56	6B.32

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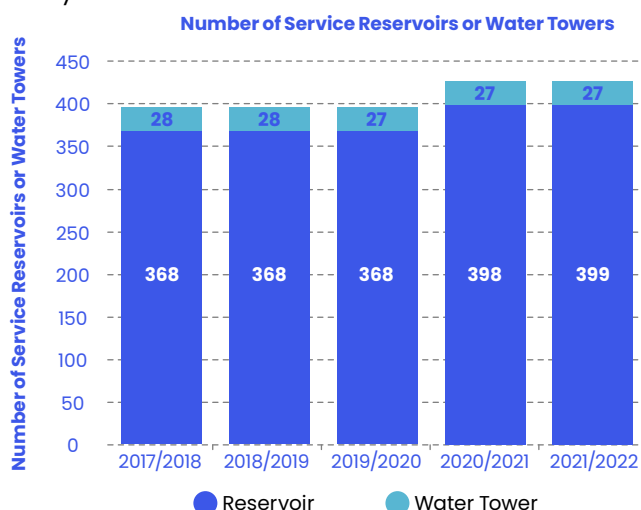
This table shows our assets and operations on our treated water distribution for the 12 months ending 31 March 2022. Overall, the figures within this table have seen little movement when compared to 2020/2021.

6B.1 & 20-24: The total reported here of 74,058 kW is generated from 501 Water Pumping Stations within our regional area which is a marginal reduction when compared to 2020/2021.

The below table shows how this data, along with 6B.20-24 has trended over the past three years:

Data Item	Line Description	2019/2020	2020/2021	2021/2022
6B.1	Total installed power capacity of potable water pumping stations	71304 kW	75749 kW	74058 kW
6B.20	Total number of potable water pumping stations that pump into and within the treated water distribution system	531	527	501
6B.21	Number of potable water pumping stations delivering treated groundwater into the Treated Water Distribution System	23	23	23
6B.22	Number of potable water pumping stations delivering treated surface water into the Treated Water Distribution System	62	62	58
6B.23	Number of potable water pumping stations that re-pump water already within the Treated Water Distribution System	446	442	420
6B.24	Number of potable pumping stations that pump water imported from a 3rd party supply into the Treated Water Distribution System	0	0	0

6B.2, 3, 25 & 26: After seeing a step change in our volume of service reservoirs and water towers between 2019/2020 and 2020/2021, this year the volume only grew by one. The below chart shows how these volumes have trended over the last five years:



6B.12-19: Distribution input is the amount of water entering the distribution system and at the point we produce it. These lines contain data around the sources of this input.

We have reported volumes in for lines 6B.12-15 only as we have no artificial recharge, aquifer storage and recovery, saline abstractions or water reuse schemes in use. Below we show how these have developed over the past three years:

Data Item	Line Description	2019/2020	2020/2021	2021/2022
6B.12	Proportion of distribution input derived from impounding reservoirs	0.729	0.606	0.537
6B.13	Proportion of distribution input derived from pumped storage reservoirs	0.017	0.139	0.182
6B.14	Proportion of distribution input derived from river abstractions	0.059	0.057	0.012
6B.15	Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	0.195	0.198	0.269

Table 6C

Water Network+ – Mains, communication pipes and other data for the 12 months ended 31 March 2022

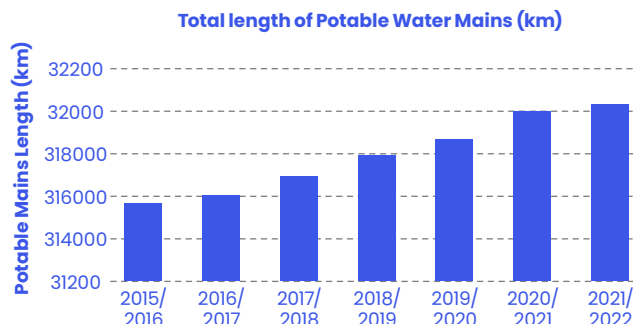
Line description	Units	DPs	Input	RAG 4 reference
Treated water distribution – mains analysis				
Total length of potable mains as at 31 March	km	1	32114.6	6C.1
Total length of potable mains relined	km	1	0.0	6C.2
Total length of potable mains renewed	km	1	8.3	6C.3
Total length of new potable mains	km	1	90.5	6C.4
Total length of potable water mains (≤320mm)	km	1	29758.4	6C.5
Total length of potable water mains (>320mm and ≤ 450mm)	km	1	994.5	6C.6
Total length of potable water mains (>450mm and ≤610mm)	km	1	846.1	6C.7
Total length of potable water mains (>610mm)	km	1	515.6	6C.8
Communication pipes				
Number of lead communication pipes	nr	0	1264067	6C.9
Number of galvanised iron communication pipes	nr	0	1948	6C.10
Number of other communication pipes	nr	0	931944	6C.11
Treated water distribution – mains age profile				
Total length of potable mains laid or structurally refurbished pre-1880	km	1	344.9	6C.12
Total length of potable mains laid or structurally refurbished between 1881 and 1900	km	1	1872.3	6C.13
Total length of potable mains laid or structurally refurbished between 1901 and 1920	km	1	841.7	6C.14
Total length of potable mains laid or structurally refurbished between 1921 and 1940	km	1	4662.5	6C.15
Total length of potable mains laid or structurally refurbished between 1941 and 1960	km	1	8888.1	6C.16
Total length of potable mains laid or structurally refurbished between 1961 and 1980	km	1	5119.4	6C.17
Total length of potable mains laid or structurally refurbished between 1981 and 2000	km	1	6444.8	6C.18
Total length of potable mains laid or structurally refurbished post 2001	km	1	3940.9	6C.19
Other				
Company area	km ²	0	14294	6C.20
Number of lead communication pipes replaced for water quality	nr	0	4114	6C.21
Compliance Risk Index	nr	2	4.83	6C.22
Event Risk Index	nr	0	2364	6C.23

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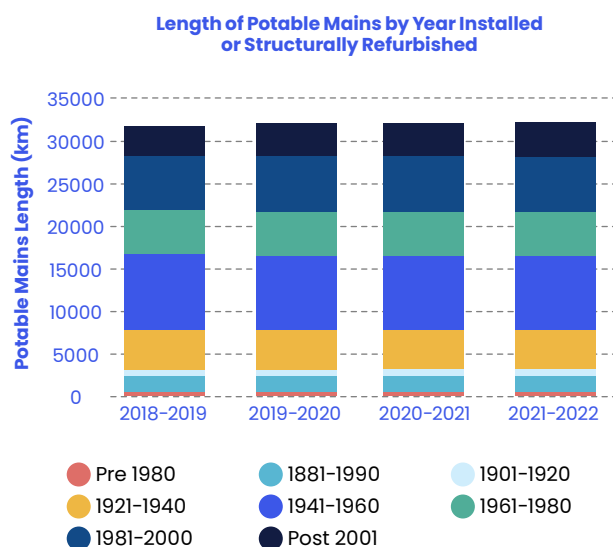
Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

6C.1-8: This section of the table shows our treated water distribution mains analysis for the 12 months ending on 31 March 2022. These figures have grown year on year as we develop our regional network. The below chart shows how the key data within this section has trended over time:



6C.9-11: These lines report the number of communication pipes for the 12 months ending 31 March 2022. The volumes here show a reduction in lead communication pipes. This is due to an on-going replacement programme and a reduction in galvanised iron pipes as part of a continued drive on active leakage reduction. The number of other communication pipes has increased as expected due to the replacement programme and the general rate of new connections being added to our network.

6C.12-19: This section of data shows our treated water distribution by mains age profile. All figures within this section are in line with business expectation and the below chart shows how this has trended over the previous four years:



6C.20: The company area based on the clean water boundaries is 14,294km².

6C.22 & 23: These two data items displays out Compliance Risk Index and Event Risk Index. [Click here](#) to view these in more detail.

Table 6D**Demand management – Metering and leakage activities for the 12 months ended 31 March 2022**

Line description	Units	DPs	Basic meter	AMR meter	AMI meter	RAG 4 reference
Metering activities – Totex expenditure						
New optant meter installation for existing customers	£m	3	0.000	6.014	0.000	6D.1
New selective meter installation for existing customers	£m	3	0.000	0.000	0.000	6D.2
New business meter installation for existing customers	£m	3	0.005	0.018	0.000	6D.3
Residential meters renewed	£m	3	0.000	0.967	0.044	6D.4
Business meters renewed	£m	3	0.000	0.306	0.009	6D.5
Metering activities – Explanatory variables						
New optant meters installed for existing customers	000s	3	0.000	22.508	0.000	6D.6
New selective meters installed for existing customers	000s	3	0.000	0.000	0.000	6D.7
New business meters installed for existing customers	000s	3	0.014	0.049	0.001	6D.8
Residential meters renewed	000s	3	0.000	2.568	0.000	6D.9
Business meters renewed	000s	3	0.000	0.811	0.000	6D.10
New residential meters installed for existing customers – supply-demand balance benefit	MI/d	2	0.00	0.18	0.00	6D.11
New business meters installed for existing customers – supply-demand balance benefit	MI/d	2	0.00	0.00	0.00	6D.12
Residential meters renewed – supply-demand balance benefit	MI/d	2		0.00	0.00	6D.13
Business meters renewed – supply-demand balance benefit	MI/d	2		0.00	0.00	6D.14
Residential properties – meter penetration	%	1	0.0	58.8	0.0	6D.15
Leakage activities						
	Units	DPs	Maintaining leakage	Reducing leakage	Total	
Total leakage activity	£m	3	6.030	3.084	9.114	6D.16
Leakage improvements delivering benefits in 2020-25	MI/d	2			6.70	6D.17
Per capita consumption (excluding supply pipe leakage)						
Per capita consumption (measured)	l/h/d	2	111.43			6D.18
Per capita consumption (unmeasured)	l/h/d	2	155.87			6D.19

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6D.6-15: This data reports our metering activities split by basic meter, automatic meter reading (AMR) meter and advanced metering infrastructure (AMI) meter. Yorkshire Water do not selectively meter residential premises, therefore 6D.7 has a zero reported value. The number of residential meters installed and renewed during 2021/2022 has increased by 26.5% when compared to 2020/2021. This reflects a return to normal ways of working following the COVID-19 pandemic. The business meters have seen some movement compared to 2020/2021, however, these movements are only small and non-material to the overall meter base.

The vast majority of our installs and renewals are done on an AMR meter basis. An AMR meter works by creating a connection channel between the meter and ourselves as the supplier. The most noteworthy advantages for using these systems are increased efficiencies, outage detection, tamper notification and reduced labour cost as a result of automating reads compared to recording data via manual methods.

6D.16 & 17: This section of the data table holds some reportable 'leakage activity' values. For a full breakdown on how we have performed against our leakage performance commitment, [click here](#).

6D.18 & 19: This section of data holds some reportable 'per capital consumption (PCC)' values. For a full breakdown on how we have performed against our PCC performance commitment, [click here](#).

The below table shows how our meter renewals compare to our business plan:

2021/2022					
Line	F/cast number	F/cast %	Actual number	Actual %	Variance
6D.9 Residential meters renewed	3,708	75%	2,568	76%	-1,140
6D.10 Business meters renewed	1,236	25%	811	24%	-425
Total	4,944		3,379		-1,565

2021/2022					
Line	F/cast number	F/cast %	Actual number	Actual %	Variance
Proactive meter replacements - asset life expired (circa 15 years +/-H&S)	415	8%	169	5%	-246
Reactive meter replacements - damaged meters	4,529	92%	3,210	95%	-1,319
Total	4,944		3,379		-1,565

Table 6F
WRMP annual reporting on delivery - non-leakage activities

					Capital expenditure (£m)						Opex costs (£m)						
Line description	Units	DPs	Classification	Delivery year (in use)	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	RAG 4 reference
Catterick Borehole	3		Supply-side improvements delivering benefits in 2020-2025	2023-24	0.000	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.076	0.076	0.076	6F.1
Brayton Borehole	3		Supply-demand balance improvements delivering benefits starting from 2026	n/a	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6F.2
Total	3				0.000	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.076	0.076	0.076	6F.21
					Benefits (Ml/a)						Complete for internal interconnectors only						
Line description	Units	DPs	Classification	Delivery year (in use)	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	Length (km)	Diameter (mm)	Pipe material (text-freeform)	Pumping capacity installed (kW)	Storage capacity installed (m3)		RAG 4 reference
Catterick Borehole	3		Supply-side improvements delivering benefits in 2020-2025	2023-24	0.00	0.00	2.00	2.00	2.00	2.00	n/a	n/a	n/a	n/a	n/a	n/a	6F.1
Brayton Borehole	3		Supply-demand balance improvements delivering benefits starting from 2026	n/a	0.00	0.00	0.00	0.00	0.00	0.00	n/a	n/a	n/a	n/a	n/a	n/a	6F.2
Total	3				0.00	0.00	2.00	2.00	2.00	2.00	0.0			0	0.000		6F.51

Capital Expenditure

We have included the actual spend to date and the internal forecast of expenditure for the rest of the AMP.

6F relates to a licence application we plan to submit to the Environment Agency this current financial year. The 40k covers investigations to support the application to increase the volume we abstract from our Catterick Borehole.

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Operating Expenditure

This is a new table for 2021/2022 and operating expenditure is £nil for the current year. This reconciles back to [Table 4L](#).

The operating expenditure for future years is a best estimate at this point in time.

Table 7: Additional regulatory information – wastewater Network+

Introduction

The information in this section details ‘Additional regulatory information– wastewater Network+’ as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables:

[**Pro forma 7A**](#) Wastewater Network+ Functional expenditure for the 12 months ended 31st March 2022

[**Pro forma 7B**](#) Wastewater Network+ Large sewage treatment works for the 12 months ended 31 March 2022

[**Pro forma 7C**](#) Wastewater Network+ Sewer and volume data for the 12 months ended 31st March 2022

[**Pro forma 7D**](#) Wastewater Network+ Sewage treatment works data for the 12 months ended 31st March 2022

[**Pro forma 7E**](#) Wastewater Network+ Energy consumption and other data for the 12 months ended 31st March 2022

[**Pro forma 7F**](#) Wastewater Network+ – WINEP phosphorus removal scheme costs and cost drivers

Table 7A

Wastewater Network+ – Functional expenditure for the 12 months ended 31 March 2022

Line description	Units	DPs	£'000	RAG 4 reference
Costs of STWs in size bands 1 to 5				
Direct costs of STWs in size band 1	000s	3	2,192.942	7A.1
Direct costs of STWs in size band 2	000s	3	1,426.233	7A.2
Direct costs of STWs in size band 3	000s	3	3,671.130	7A.3
Direct costs of STWs in size band 4	000s	3	5,012.455	7A.4
Direct costs of STWs in size band 5	000s	3	7,294.604	7A.5
General & support costs of STWs in size bands 1 to 5	000s	3	3,183.558	7A.6
Functional expenditure of STWs in size bands 1 to 5 (excluding 3rd party services)	000s	3	22,780.922	7A.7
Costs of large STWs (size band 6)				
Service charges for STWs in size band 6	000s	3	2,362.000	7A.8
Estimated terminal pumping costs size band 6 works	000s	3	1,406.000	7A.9
Other direct costs of STWs in size band 6	000s	3	53,554.000	7A.10
Direct costs of STWs in size band 6	000s	3	57,322.000	7A.11
General & support costs of STWs in size band 6	000s	3	9,596.000	7A.12
Functional expenditure of STWs in size band 6 (excluding 3rd party services)	000s	3	66,918.000	7A.13
Costs of STWs – all sizes				
Total operating functional expenditure (excluding 3rd party services)	000s	3	89,698.922	7A.14

Functional expenditure

This table analyses the costs of different size sewage treatment works. All direct costs have been allocated to sites where possible, with nearly all large works separately costed. For minor works, which are grouped into areas for materiality reasons, the costs were sub-divided into the following categories for optimum allocation:

- Site specific
- Area site costs
- Employee direct costs
- Maintenance
- Facilities costs
- General and support.

The requirement for the table is to have all above costs directly/indirectly allocated in bands 1–6 which are defined in RAG 4.10. The information to split the sites into bands and sewage treatment works (STW) loads has been reviewed again this year from the asset inventory system, and any changes in loads and band categories have been adjusted accordingly.

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Table 7B

Wastewater Network+ – Large sewage treatment works for the 12 months ended 31 March 2022

Due to the size of the data table, we have published Table 7B separately on our website here:

7B.1: Compared with 2020/2021, the sites being reported has increased by one; the addition being Selby Sewerage Treatment Works (STW). The works has moved from band 5 to band 6, with the prominent factor being resident population increasing by 10%. This is as a result of improved population data.

7B.2: There have been two changes in treatment type compared to 2020/2021. These changes have occurred at Beverley and Malton. Beverley STW had a tertiary activated sludge process (ASP) converted to secondary ASP which changed the type. Malton STW has had new tertiary treatment added which changed the type.

7B.3: There has been some slight variations in the population equivalent (PE) of total load received, with the vast majority within a 10% variation. Load can vary due to changes in resident population & trade loads received to the works, both of which fluctuate year on year so these changes are within expected tolerances. Across the region population figures have increased by 3.9%, which is due to the use of newly available data that increases accuracy of reporting. The band 6 works have increased by an average of 4.4% across the two reporting years. Calder Vale, Castleford and Neiley are the only sites with a change of greater than 10% (all between 12-13.5% increases). Calder Vale and Neiley increases are mainly driven by Trade Effluent change, where Castleford is predominantly from Resident PE increases.

7B.4-8: There have been no consent changes for the information reported in Lines 4 to 8.

7B.9: Biological oxygen demand (BOD), is the amount of oxygen required to remove waste organic matter from water. The data in this line is calculated from the figure in Table 7B.3 (population). Converting population (1000s) to load of KG BOD5/Day is done using industry standard 60g BOD/head/day, i.e. Aldwarke Population is 115077 (115.08 in 1000s) so $115.08 \times 60 = 6905 \text{ kgBOD5/day}$.

7B.10: Compared to 2020/2021, the overall volume of treated flow recorded at the large STWs has decreased by an average of 5.95% which compares this year with the overall decrease in flow seen in the reporting period as shown in [Table 7C.13](#) (3.16% decrease). These variations are generally in response to rainfall.

Functional expenditure

This table follows on from [Table 7A](#), lines 8-14. All the sites above are separately costed within Yorkshire Water's accounting systems.

Section B of the table looks at functional expenditure for the large sewage treatment works which fall within band 6 category as shown in [Table 7A](#).

The number of works in this category has increased by one sewage treatment work from Band 5 into Band 6 due to increased loads.

Most sites have experienced an increase in costs due to the impact of volatile market prices on unhedged energy costs.

We have made further improvements and worked with the operational business to ensure categorisation of band 6 works align.

- Brighouse Upper – total direct expenditure has reduced by £0.4m (90%), as a result of further optimisation of site costs after the completion of a capital scheme.
- Deighton – total direct expenditure has increased by £2.8m (1046%) due to refinement in allocation of band 6 works to align with the non-financial data.
- Keighley Marley – total costs have increased by £0.4m (56%). This site has required significant focus from a compliance perspective, with additional equipment required on site to mitigate long standing assets issues, resulting in increased electricity consumption.

- Lundwood – total costs have increased by £0.6m (66%). There has been additional site power consumption primarily due to surface aerators to support compliance. Furthermore, a metering investigation is currently underway to establish the cause of high site consumption.
- Malton – total costs have increased by £0.3m (151%) due to the increased level of loads to the works from traders resulting in additional treatment requirements.
- Salterhebble – an increase in costs of £2.0m (1094%) due to refinement in allocation of band 6 works to align with the non-financial data.
- Sandall – increase in costs of £1.3m (115%) from additional equipment requirements on site to meet site compliance, resulting in increased electricity consumption.
- Scarborough – costs increased by £0.8m (83%) due to an increase in ultraviolet (UV) treatment to ensure compliance with bathing water requirements.
- Selby is a new addition to the band 6 treatments works as a result of increased loads.

Table 7C**Wastewater Network+ – Sewer and volume data for the 12 months ended 31 March 2022**

Line description	Units	DPs	Input	RAG 4 reference
Wastewater network				
Connectable properties served by s101A schemes completed in the report year	nr	0	0	7C.1
Number of s101A schemes delivered in the report year	nr	0	0	7C.2
Total pumping station capacity	kW	0	88,887	7C.3
Number of network pumping stations	nr	0	2,585	7C.4
Total number of sewer blockages	nr	0	26,373	7C.5
Total number of gravity sewer collapses	nr	0	555	7C.6
Total number of sewer rising main bursts	nr	0	59	7C.7
Number of combined sewer overflows	nr	0	2,054	7C.8
Number of emergency overflows	nr	0	601	7C.9
Number of settled storm overflows	nr	0	179	7C.10
Sewer age profile (constructed post 2001)	km	0	2,528	7C.11
Volume of trade effluent	MI/yr	2	17,149.86	7C.12
Volume of wastewater receiving treatment at sewage treatment works	MI/yr	2	663,948.12	7C.13
Length of gravity sewers rehabilitated	km	0	21	7C.14
Length of rising mains replaced or structurally refurbished	km	0	4	7C.15
Length of foul (only) public sewers	km	0	5,403	7C.16
Length of surface water (only) public sewers	km	0	7,569	7C.17
Length of combined public sewers	km	0	16,261	7C.18
Length of rising mains	km	0	1,283	7C.19
Length of other wastewater network pipework	km	0	355	7C.20
Total length of "legacy" public sewers as at 31 March	km	0	30,871	7C.21
Length of formerly private sewers and lateral drains (s105A sewers)	km	0	21,560	7C.22

This table shows our wastewater network volumes for the 12 months ending March 2022. The majority have increased when comparing to 2020/2021 reported values, which is in line with business expectation as we develop and grow our regional network. The items which have decreased are 7C.13, which is generally impacted by weather throughout the year and 7C.18 as we have reduced the level of combined network developments within the region.

For 7C.15, structural refurbishment is lining that would extend the asset life (50 years +), removing the need for a more costly renewal solution.

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Table 7D**Wastewater Network+ – Sewage treatment works data for the 12 months ended 31 March 2022**

Line description	Units	DPs	Primary	Treatment categories						Total	RAG 4 reference
				Activated Sludge	Biological	Secondary		Tertiary			
						A1	A2	B1	B2		
Load received at sewage treatment works											
Load received by STWs in size band 1	kg BOD ₅ /day	0	65	402	1,066	28	0	69	0	1,630	7D.1
Load received by STWs in size band 2	kg BOD ₅ /day	0	50	244	901	25	16	157	77	1,470	7D.2
Load received by STWs in size band 3	kg BOD ₅ /day	0	130	816	2,266	172	237	812	872	5,305	7D.3
Load received by STWs in size band 4	kg BOD ₅ /day	0	0	3,902	7,578	893	2,812	1,239	4,227	20,651	7D.4
Load received by STWs in size band 5	kg BOD ₅ /day	0	0	9,227	13,056	3,565	4,879	2,873	9,318	42,918	7D.5
Load received by STWs above size band 5	kg BOD ₅ /day	0	0	202,478	19,357	6,015	61,142	0	0	288,992	7D.6
Total load received	kg BOD ₅ /day	0	245	217,069	44,224	10,698	69,086	5,150	14,494	360,966	7D.7
Load received from trade effluent customers at treatment works	kg BOD5/day	0							44,705	7D.8	
Number of sewage treatment works											
STWs in size band 1	nr	0	31	67	202	3	0	8	0	311	7D.9
STWs in size band 2	nr	0	2	11	41	1	1	6	4	66	7D.10
STWs in size band 3	nr	0	2	13	36	2	4	13	10	80	7D.11
STWs in size band 4	nr	0	0	13	25	2	9	5	17	71	7D.12
STWs in size band 5	nr	0	0	8	14	3	5	3	9	42	7D.13
STWs above size band 5	nr	0	0	20	6	3	7	0	0	36	7D.14
Total number of works	nr	0	35	132	324	14	26	35	40	606	7D.15

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 7D – Continued

Wastewater Network+ – Sewage treatment works data for the 12 months ended 31 March 2022

Line description	Units	DPs	Primary	RAG 4 reference
Population equivalent				
Current population equivalent served by STWs	000s	3	6,036.382	7D.16
Current population equivalent served by STWs with tightened/new P consents	000s	3	5.625	7D.17
Current population equivalent served by STWs with tightened/new N consents	000s	3	0.000	7D.18
Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	3	0.000	7D.19
Current population equivalent served by STWs with tightened/new UV consents	000s	3	0.000	7D.20
Population equivalent treatment capacity enhancement	000s	3	0.000	7D.21
Current population equivalent served by STWs with tightened/new consents for chemical	000s	3	0.000	7D.22
Cumulative shortfall in FFT addressed by WINEP/NEP schemes to increase STW capacity	l/s	3	0.000	7D.23
Additional storm tank capacity provided at STWs	m3	3	0.000	7D.24
Additional volume of network storage at CSOs etc to reduce spill frequency	m3	3	0.000	7D.25

Key



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Table 7D – Continued

Wastewater Network+ – Sewage treatment works data for the 12 months ended 31 March 2022

		Treatment works consents																			
		Phosphorus						BOD ₅						Ammonia							
Line description	Units	DPs	<=0.5 mg/l	>0.5 to <=1mg/l	>1mg/l	No permit	Total	<=7 mg/l	>7 to <=10mg/l	>10 to <=20mg/l	>20 mg/l	No permit	Total	<=1 mg/l	>1 to <=3mg/l	>3 to <=10mg/l	>10 mg/l	No permit	Total	RAG 4 reference	
Load received at sewage treatment works																					
Load received by STWs in size band 1	kg BOD ₅ /day	0	0	0	0	1,630	1,630	0	0	25	76	1,529	1,630	0	0	10	146	1,474	1,630	7D.1	
Load received by STWs in size band 2	kg BOD ₅ /day	0	0	19	0	1,451	1,470	0	0	230	757	484	1,471	0	25	272	729	444	1,470	7D.2	
Load received by STWs in size band 3	kg BOD ₅ /day	0	252	162	344	4,546	5,304	0	159	1,373	3,458	313	5,303	0	120	1,979	2,602	604	5,305	7D.3	
Load received by STWs in size band 4	kg BOD ₅ /day	0	1,255	944	482	17,969	20,650	0	1,463	5,449	9,719	4,020	20,651	0	2,578	6,575	5,971	5,527	20,651	7D.4	
Load received by STWs in size band 5	kg BOD ₅ /day	0	4,670	2,833	3,681	31,734	42,918	0	4,479	14,750	21,518	2,172	42,919	0	7,306	22,356	7,561	5,696	42,919	7D.5	
Load received by STWs above size band 5	kg BOD ₅ /day	0	0	1,740	0	287,251	288,991	0	25,711	134,376	88,654	40,249	288,990	5,485	141,693	91,431	8,606	41,776	288,991	7D.6	
Total load received	kg BOD ₅ /day	0	6,177	5,698	4,507	344,581	360,963	0	31,812	156,203	124,182	48,767	360,964	5,485	151,722	122,623	25,615	55,521	360,966	7D.7	
Load received from trade effluent customers at treatment works	kg BOD ₅ /day	0																		7D.8	
Number of sewage treatment works																					
STWs in size band 1	nr	0	0	0	0	311	311	0	0	2	10	299	311	0	0	1	14	296	311	7D.9	
STWs in size band 2	nr	0	0	1	0	65	66	0	0	10	32	24	66	0	1	12	31	22	66	7D.10	
STWs in size band 3	nr	0	4	2	5	69	80	0	2	20	52	6	80	0	1	27	42	10	80	7D.11	
STWs in size band 4	nr	0	4	3	3	61	71	0	5	19	36	11	71	0	6	25	23	17	71	7D.12	
STWs in size band 5	nr	0	5	3	4	30	42	0	4	15	21	2	42	0	6	23	8	5	42	7D.13	
STWs above size band 5	nr	0	0	1	0	35	36	0	1	13	18	4	36	1	10	16	4	5	36	7D.14	
Total number of works	nr	0	13	10	12	571	606	0	12	79	169	346	606	1	24	104	122	355	606	7D.15	

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7D.1-7: Overall there has been an increase of 3.43% in the total load (kg BOD5/day) as reported in Line 7. The loads within Bands 2 and 6 have shown an increase, and Bands 1, 3 and 5 have decreased.

7D.8: This has shown a 2.64% increase in trade load. The increase follows a sharp decline in the previous reporting year which was a direct result of the pandemics impact on Trade Effluent activity; the sector is now showing recovery but hasn't yet returned to the pre pandemic levels.

7D.9-15: The overall number of STWs being reported is 606 which is one less than 2020/2021 reported value. The site that not reported is Baldersby St James STW (Band 1).

There have been a number of band changes since last year. The table below summarises the changes; generally, sites have moved up or down by a single band as PE changes have moved sites into the next threshold. The exception to this is Melton College which has moved from being a Band 4 site to Band 1, which is due to the college closing in recent years and revised figures being made available.

7D.16: There has been 3.9% increase in population equivalent from 2020/2021.

7D.17: Current population equivalent served by STWs with tightened/new P consents.

Four STWs have claimed WINEP output with new P consents within the reporting year.

The spend against these outputs is captured in [Table 4M.28](#) The sites claimed are Oxenhope, Sheriff Hutton, Stillington and Sutton on The Forrest.

The reported PE for this measure is 5.625 (5624.69/1000).

STW	Population
OXENHOPE/NO 2 STW	2145.08
SHERRIF HUTTON/STW	966.00
STILLINGTON/STW	776.00
SUTTON ON THE FOREST/STW	1737.61
	5624.69

STW	2020/2021	2021/2022
ASSELBY/STW	1	2
BISHOP WILTON/STW	1	2
BOROUGHBRIDGE/NO 2 STW	4	5
BOTTON/STW	2	1
CHERRY BURTON/STW	4	3
DRAX/STW	3	2
ELLERKER/NO 2 STW	5	4
EMBSAY/STW	3	4
GILLING EAST/STW	2	1
GOOLE RAWCLIFFE/STW	3	4
GRASSINGTON/STW	3	4
HUNSINGORE/STW	1	2
INGBIRCHWORTH/NO 2 STW	2	3
KIRK HAMMERTON/STW	3	4
LINTON ON OUSE/STW	4	3
MASHAM/STW	4	3
MELTON COLLEGE/STW	4	1
NEWTON LE WILLOWS/STW	3	2
NUN MONKTON/STW	2	3
REETH/STW	3	2
SELBY/NO 2 STW	5	6
SKIDBY/STW	4	3
TERRINGTON/STW	3	2
THORGANBY/STW	1	2
THORP ARCH/STW	4	5
WELBURN/STW	3	2
WENTWORTH CASTLE/STW	2	1
WEST BURTON/STW	2	1

Table 7E

Wastewater Network+ – Energy consumption and other data for the 12 months ended 31 March 2022

Line description	Units	DPs	Input	RAG 4 reference
Other				
Total sewerage catchment area	km ²	0	1,695	7E.1
Designated coastal bathing waters	nr	0	19	7E.2
Number of intermittent discharge sites with event duration monitoring	nr	0	128	7E.3
Number of monitors for flow monitoring at STWs	nr	0	38	7E.4
Number of odour related complaints	nr	0	379	7E.5
Energy consumption				
Energy consumption – sewage collection	MWh	3	332,951.617	7E.6
Energy consumption – sewage treatment	MWh	3	85,562.503	7E.7
Energy consumption – wastewater Network+	MWh	3	418,514.120	7E.8

The reported value for 7E.1, is calculated using the below breakdown:

Dataset	km ²
Total Sewerage Catchment Area	1695.143
Total WW NAV with overlap on Catchment area	0.339956
Revised total Catchment Area less NAV overlap	1694.803

Our reported number of ‘Designated coastal bathing waters’ has remained unchanged for 2020/2021, 19 in total.

The EA issued extension to Year 1 reporting for 7E.4 and 7E.5 following the impact COVID-19 had on companies. The initial sign off date for Year 1 was March 2021 but this was extended to September 2021. Therefore The reported volume of 128 and 38 for these data items, covers 2020 to 2022.

A success we saw during 2021/2022, was seeing a 58% reduction in the number of odour related complaints compared to 2020/2021.

The energy consumption volumes reported within 7E.6–7E.8 are in line with business expectation and compare similarly to 2020/2021.

Key

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 7F

Wastewater Network+ - WINEP phosphorus removal scheme costs and cost drivers

			Capital expenditure							Operating expenditure							RAG 4 reference
Line description	Units	DPs	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	
Ackworth WwTW	£m	3	0.002	0.038	0.194	0.488	1.695	0.659		0.000	0.000	0.000	0.000	0.011	0.092	0.092	7F.1
Adwick No 2 STW	£m	3	0.002	0.052	0.246	1.628	4.703	0.428		0.000	0.000	0.000	0.000	0.000	0.169	0.169	7F.2
Aldwarke WwTW	£m	3	0.001	0.087	0.486	1.022	2.354	1.001		0.000	0.000	0.000	0.000	0.096	0.670	0.670	7F.3
Balby STW	£m	3	0.001	0.191	0.112	0.438	1.085	0.000		0.000	0.000	0.000	0.000	0.073	0.191	0.191	7F.4
Bentley STW	£m	3	0.000	0.141	0.121	0.145	0.303	0.004		0.000	0.000	0.000	0.000	0.011	0.154	0.154	7F.5
Bishop Wilton WwTW	£m	3	0.002	0.079	0.125	0.801	1.086	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.6
Blackburn Meadows	£m	3	0.013	0.349	2.038	1.549	8.533	21.617		0.000	0.000	0.000	0.000	0.000	3.300	4.400	7F.7
Bolsover STW	£m	3	0.004	0.142	0.292	2.031	2.627	0.000		0.000	0.000	0.000	0.000	0.000	0.066	0.066	7F.8
Bolton On Dearne	£m	3	0.000	0.074	0.189	0.672	0.251	0.000		0.000	0.000	0.000	0.000	0.000	0.070	0.070	7F.9
Bradford Esholt WwTW	£m	3	0.008	0.239	2.998	1.356	14.182	6.785		0.000	0.000	0.000	0.000	0.000	2.267	3.023	7F.10
Caldervale	£m	3	0.004	0.219	2.179	2.636	6.250	3.750		0.000	0.000	0.000	0.000	0.000	0.582	0.776	7F.11
Carleton STW	£m	3	0.004	0.083	0.137	1.412	3.590	0.044		0.000	0.000	0.000	0.000	0.013	0.127	0.127	7F.12
Carthorpe WwTW	£m	3	0.004	0.004	0.111	0.159	3.372	0.908		0.000	0.000	0.000	0.000	0.000	0.043	0.043	7F.13
Castleford WwTW	£m	3	0.001	0.053	0.517	0.114	-0.143	0.133		0.000	0.000	0.000	0.000	0.000	0.088	0.117	7F.14
Cheesebottom WwTW	£m	3	0.004	0.004	0.647	0.507	0.000	3.438		0.000	0.000	0.000	0.008	0.000	0.107	0.107	7F.15
Clayton West WwTW	£m	3	0.003	0.004	0.628	0.509	0.000	2.552		0.000	0.000	0.000	0.000	0.000	0.196	0.196	7F.16
Clifton STW	£m	3	0.001	0.224	1.285	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.17
Crofton STW	£m	3	0.002	0.080	0.203	0.730	1.055	0.000		0.000	0.000	0.000	0.000	0.000	0.101	0.101	7F.18
Danesmoor STW	£m	3	0.001	0.146	0.340	0.296	0.735	0.000		0.000	0.000	0.000	0.000	0.052	0.114	0.114	7F.19
Darton WwTW	£m	3	0.000	0.153	0.283	0.729	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.092	0.092	7F.20
Denaby WwTW	£m	3	0.000	0.000	0.436	0.515	0.000	0.469		0.000	0.000	0.000	0.000	0.000	0.173	0.173	7F.21

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Table 7F - Continued

Wastewater Network+ - WINEP phosphorus removal scheme costs and cost drivers

			Capital expenditure							Operating expenditure							RAG 4 reference
Line description	Units	DPs	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	
Dewsbury WwTW	£m	3	0.022	0.101	0.925	0.799	12.274	9.479		0.000	0.000	0.000	0.000	0.330	2.263	2.263	7F.22
Dishforth WwTW	£m	3	0.003	0.003	0.053	0.276	2.014	0.863		0.000	0.000	0.000	0.000	0.000	0.046	0.046	7F.23
Dowley Gap WwTW	£m	3	0.004	0.005	0.801	0.146	0.000	4.534		0.000	0.000	0.000	0.019	0.006	0.219	0.219	7F.24
Draughton WwTW	£m	3	0.002	0.003	0.103	0.589	0.613	1.716		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.25
Dronfield WwTW	£m	3	0.003	0.069	0.677	0.501	5.286	1.645		0.000	0.000	0.000	0.000	0.000	0.267	0.356	7F.26
East Marton WwTW	£m	3	0.001	0.002	0.002	0.181	0.735	0.735		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.27
Eastwood WwTW	£m	3	0.004	0.004	0.537	0.448	0.000	3.446		0.000	0.000	0.000	0.000	0.000	0.079	0.079	7F.28
Elmsall STW	£m	3	0.008	0.150	0.409	0.957	5.986	2.682		0.000	0.000	0.000	0.000	0.026	0.285	0.285	7F.29
Embsay STW	£m	3	0.002	0.176	0.015	0.174	0.000	2.104		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.30
Ewden (Stocksbridge) WwTW	£m	3	0.000	0.077	0.534	0.605	0.200	0.000		0.000	0.000	0.000	0.000	0.000	0.089	0.089	7F.31
Garforth STW	£m	3	0.003	0.011	0.182	1.044	2.081	0.617		0.000	0.000	0.000	0.000	0.013	0.181	0.181	7F.32
Grimethorpe STW	£m	3	0.001	0.145	0.341	1.881	0.457	1.581		0.000	0.000	0.000	0.000	0.030	0.253	0.253	7F.33
Halifax Copley WwTW	£m	3	0.011	0.167	0.604	0.763	2.624	0.820		0.000	0.000	0.000	0.000	0.156	1.119	1.119	7F.34
Harome WwTW	£m	3	0.003	0.003	0.820	0.343	0.000	2.135		0.000	0.000	0.000	0.005	0.005	0.035	0.035	7F.35
Harrogate South WwTW	£m	3	0.000	0.001	0.288	0.545	0.000	0.558		0.000	0.000	0.000	0.029	0.006	0.314	0.314	7F.36
Hatfield Woodhouse STW	£m	3	0.002	0.152	0.137	0.396	1.988	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.37
High Royd STW	£m	3	0.008	0.348	1.706	2.816	2.488	2.488		0.000	0.000	0.000	0.016	0.097	0.097	0.097	7F.38
Horbury WwTW	£m	3	0.003	0.003	0.430	0.502	0.000	2.509		0.000	0.000	0.000	0.000	0.000	0.094	0.094	7F.39
Hoylandswaine WwTW	£m	3	0.002	0.002	0.130	0.782	3.057	3.380		0.000	0.000	0.000	0.000	0.000	0.049	0.049	7F.40
Huddersfield Complex	£m	3	0.010	0.478	2.027	3.646	17.377	8.348		0.000	0.000	0.000	0.000	0.358	3.063	3.063	7F.41
Ingbirchworth No2 WwTW	£m	3	0.003	0.004	0.114	0.321	2.275	1.563		0.000	0.000	0.000	0.000	0.000	0.024	0.024	7F.42

Key

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Table 7F - Continued

Wastewater Network+ - WINEP phosphorus removal scheme costs and cost drivers

			Capital expenditure							Operating expenditure							RAG 4 reference
Line description	Units	DPs	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	
Keighley Marley STW	£m	3	0.011	0.233	0.810	2.696	0.075	9.481		0.000	0.000	0.000	0.000	0.000	0.731	0.731	7F.43
Killinghall STW	£m	3	0.001	0.065	0.056	0.252	0.165	0.576		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.44
Kirk Smeaton WwTW Transfer to Norton	£m	3	0.001	0.101	0.158	0.123	1.779	0.231		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.45
Kirkby Malzeard WwTW	£m	3	0.001	0.001	0.052	0.179	1.383	0.784		0.000	0.000	0.000	0.000	0.000	0.038	0.038	7F.46
Knostrop WwTW	£m	3	0.017	0.290	6.427	15.663	29.334	8.462		0.000	0.000	0.000	0.000	0.000	3.174	3.174	7F.47
Lemonroyd WwTW	£m	3	0.000	0.001	0.492	0.525	0.000	0.781		0.000	0.000	0.000	0.000	0.000	0.129	0.129	7F.48
Long Lane WwTW	£m	3	0.003	0.003	0.412	0.510	0.000	2.542		0.000	0.000	0.000	0.022	0.000	0.222	0.222	7F.49
Lundwood WwTW	£m	3	0.001	0.055	0.459	0.203	0.589	0.184		0.000	0.000	0.000	0.000	0.000	0.495	0.660	7F.50
Meltham WwTW	£m	3	0.003	0.003	0.664	0.496	0.000	2.154		0.000	0.000	0.000	0.000	0.000	0.121	0.121	7F.51
Mexborough Swinton WwTW	£m	3	0.001	0.001	0.077	0.458	2.732	0.641		0.000	0.000	0.000	0.000	0.000	0.107	0.107	7F.52
Neiley	£m	3	0.001	0.001	0.054	0.523	0.641	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.53
Normanton WwTW	£m	3	0.002	0.002	0.444	0.540	0.000	1.406		0.000	0.000	0.000	0.000	0.014	0.251	0.251	7F.54
Norton STW	£m	3	0.001	0.113	0.275	1.094	2.946	0.000		0.000	0.000	0.000	0.000	0.024	0.135	0.135	7F.55
Old Whittington WwTW	£m	3	0.004	0.187	1.107	4.084	7.063	0.892		0.000	0.000	0.000	0.000	0.073	1.476	1.476	7F.56
Oxenhope WwTW	£m	3	0.162	1.660	2.524	0.079	0.000	0.000		0.000	0.000	0.000	0.100	0.121	0.121	0.121	7F.57
Pocklington STW P	£m	3	0.004	0.178	0.424	0.190	3.351	2.745		0.000	0.000	0.000	0.000	0.014	0.135	0.135	7F.58
Rainton WwTW	£m	3	0.001	0.002	0.055	0.171	1.160	0.458		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.59
Redacre STW	£m	3	0.004	0.123	0.544	0.992	0.568	3.022		0.000	0.000	0.000	0.014	0.009	0.132	0.132	7F.60
Ripponden Wood WwTW	£m	3	0.002	0.041	0.274	0.041	2.669	2.940		0.000	0.000	0.000	0.000	0.000	0.110	0.110	7F.61
Sandall WwTW	£m	3	0.003	0.075	0.484	1.585	5.450	1.703		0.000	0.000	0.000	0.000	0.071	0.484	0.484	7F.62

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 7F – Continued

Wastewater Network+ – WINEP phosphorus removal scheme costs and cost drivers

			Capital expenditure							Operating expenditure							RAG 4 reference
Line description	Units	DPs	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	After 2024-2025	
Shaw Mills WwTW	£m	3	0.002	0.055	0.130	0.229	1.312	0.730		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.63
Sherburn In Elmet	£m	3	0.004	0.164	0.220	0.472	0.000	4.386		0.000	0.000	0.000	0.000	0.021	0.216	0.216	7F.64
Sheriff Hutton STW	£m	3	0.070	1.625	0.221	0.004	0.000	0.000		0.000	0.000	0.041	0.040	0.044	0.044	0.044	7F.65
Skipton UWWTD	£m	3	0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.66
Snaith WwTW	£m	3	0.000	0.000	0.312	0.553	0.000	0.000		0.000	0.000	0.000	0.022	0.027	0.057	0.057	7F.67
Stanley STW	£m	3	0.001	0.033	0.129	1.384	2.272	0.000		0.000	0.000	0.000	0.000	0.000	0.161	0.161	7F.68
Staveley WwTW	£m	3	0.005	0.005	0.022	0.574	0.000	5.040		0.000	0.000	0.000	0.019	0.000	0.214	0.214	7F.69
Stillington WwTW	£m	3	0.051	1.040	0.257	0.035	0.000	0.000		0.000	0.000	0.019	0.034	0.037	0.037	0.037	7F.70
Stockley STW	£m	3	0.003	0.070	0.291	0.281	2.519	0.361		0.000	0.000	0.000	0.000	0.000	0.089	0.089	7F.71
Sutton on the Forest	£m	3	0.094	1.602	0.652	0.000	0.000	0.000		0.000	0.000	0.022	0.083	0.090	0.090	0.090	7F.72
Sutton STW	£m	3	0.001	0.120	0.246	0.583	1.115	0.000		0.000	0.000	0.000	0.000	0.025	0.333	0.333	7F.73
Thorne STW	£m	3	0.001	0.131	0.276	1.359	1.080	0.000		0.000	0.000	0.000	0.000	0.000	0.097	0.097	7F.74
Thornton le Beans WwTW	£m	3	0.001	0.147	0.408	0.880	0.261	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.75
Tupton WwTW	£m	3	0.003	0.003	0.571	0.521	0.000	2.331		0.000	0.000	0.000	0.000	0.000	0.135	0.135	7F.76
Upton Wrangbrook WFD	£m	3	0.004	0.120	0.174	0.617	3.447	0.854		0.000	0.000	0.000	0.000	0.000	0.086	0.086	7F.77
Wath on Dearne STW	£m	3	0.001	0.079	0.106	0.038	3.249	0.042		0.000	0.000	0.000	0.000	0.000	0.000	0.000	7F.78
Wombwell STW	£m	3	0.001	0.148	0.230	1.013	2.539	0.000		0.000	0.000	0.000	0.000	0.000	0.298	0.298	7F.79
Woodhouse Mill WwTW	£m	3	0.003	0.225	1.020	1.052	1.496	0.055		0.000	0.000	0.000	0.000	0.257	2.205	2.205	7F.80
Worsbrough	£m	3	0.001	0.059	0.277	1.975	2.728	0.000		0.000	0.000	0.000	0.000	0.000	0.252	0.252	7F.81
Total	£m	3	0.621	13.027	45.736	77.426	193.056	145.792	0.000	0.000	0.000	0.081	0.412	2.112	29.256	31.589	7F.201

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Table 7F - Continued

Wastewater Network+ - WINEP phosphorus removal scheme costs and cost drivers

			Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4	
Line description	Units	DPs	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)		RAG 4 reference
Ackworth WwTW	£m	3					7F.1
Adwick No 2 STW	£m	3					7F.2
Aldwarke WwTW	£m	3					7F.3
Balby STW	£m	3					7F.4
Bentley STW	£m	3					7F.5
Bishop Wilton WwTW	£m	3					7F.6
Blackburn Meadows	£m	3					7F.7
Bolsover STW	£m	3					7F.8
Bolton On Dearne	£m	3					7F.9
Bradford Esholt WwTW	£m	3					7F.10
Caldervale	£m	3					7F.11
Carleton STW	£m	3					7F.12
Carthorpe WwTW	£m	3					7F.13
Castleford WwTW	£m	3					7F.14
Cheesebottom WwTW	£m	3					7F.15
Clayton West WwTW	£m	3					7F.16
Clifton STW	£m	3					7F.17
Crofton STW	£m	3					7F.18
Danesmoor STW	£m	3					7F.19
Darton WwTW	£m	3					7F.20
Denaby WwTW							7F.21

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Table 7F – Continued

Wastewater Network+ – WINEP phosphorus removal scheme costs and cost drivers

			Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4	
Line description	Units	DPs	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)		RAG 4 reference
Dewsbury WwTW	£m	3					7F.22
Dishforth WwTW	£m	3					7F.23
Dowley Gap WwTW	£m	3					7F.24
Draughton WwTW	£m	3					7F.25
Dronfield WwTW	£m	3					7F.26
East Marton WwTW	£m	3					7F.27
Eastwood WwTW	£m	3					7F.28
Elmsall STW	£m	3					7F.29
Embsay STW	£m	3					7F.30
Ewden (Stocksbridge) WwTW	£m	3					7F.31
Garforth STW	£m	3					7F.32
Grimethorpe STW	£m	3					7F.33
Halifax Copley WwTW	£m	3					7F.34
Harome WwTW –	£m	3					7F.35
Harrogate South WwTW	£m	3					7F.36
Hatfield Woodhouse STW	£m	3					7F.37
High Royd STW	£m	3					7F.38
Horbury WwTW	£m	3					7F.39
Hoylandswaine WwTW	£m	3					7F.40
Huddersfield Complex	£m	3					7F.41
Ingbirchworth No2 WwTW	£m	3					7F.42

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Table 7F – Continued

Wastewater Network+ – WINEP phosphorus removal scheme costs and cost drivers

			Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4	
Line description	Units	DPs	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)		RAG 4 reference
Keighley Marley STW	£m	3					7F.43
Killinghall STW	£m	3					7F.44
Kirk Smeaton WwTW Transfer to Norton	£m	3					7F.45
Kirkby Malzeard WwTW	£m	3					7F.46
Knostrop WwTW	£m	3					7F.47
Lemonroyd WwTW	£m	3					7F.48
Long Lane WwTW	£m	3					7F.49
Lundwood WwTW	£m	3					7F.50
Meltham WwTW	£m	3					7F.51
Mexborough Swinton WwTW	£m	3					7F.52
Neiley	£m	3					7F.53
Normanton WwTW	£m	3					7F.54
Norton STW	£m	3					7F.55
Old Whittington WwTW	£m	3					7F.56
Oxenhope WwTW	£m	3	2.507	0.000	0.300		7F.57
Pocklington STW P	£m	3					7F.58
Rainton WwTW	£m	3					7F.59
Redacre STW	£m	3					7F.60
Ripponden Wood WwTW	£m	3					7F.61
Sandall WwTW	£m	3					7F.62

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Table 7F – Continued

Wastewater Network+ – WINEP phosphorus removal scheme costs and cost drivers

			Cost driver 1	Cost driver 2	Cost driver 3	Cost driver 4	
Line description	Units	DPs	Site population equivalent (000's)	Historical consent for phosphorus (mg/L)	Enhanced consent for phosphorus (mg/L)		RAG 4 reference
Shaw Mills WwTW	£m	3					7F.63
Sherburn In Elmet	£m	3					7F.64
Sheriff Hutton STW	£m	3	1.189	0.000	1.000		7F.65
Skipton UWWTD	£m	3					7F.66
Snaith WwTW	£m	3					7F.67
Stanley STW	£m	3					7F.68
Staveley WwTW	£m	3					7F.69
Stillington WwTW	£m	3	0.873	0.000	1.500		7F.70
Stockley STW	£m	3					7F.71
Sutton on the Forest	£m	3	1.811	0.000	0.700		7F.72
Sutton STW	£m	3					7F.73
Thorne STW	£m	3					7F.74
Thornton le Beans WwTW	£m	3					7F.75
Tupton WwTW	£m	3					7F.76
Upton Wrangbrook WFD	£m	3					7F.77
Wath on Dearne STW	£m	3					7F.78
Wombwell STW	£m	3					7F.79
Woodhouse Mill WwTW	£m	3					7F.80
Worsbrough	£m	3					7F.81

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Capital expenditure

We have included the actual spend to date and the internal forecast of expenditure for the rest of the AMP.

Operating expenditure

This is a new table for 2021/2022 and operating expenditure for the current year is minimal. This reconciles back to [Table 4M](#).

The operating expenditure for future years is a best estimate at this point in time.

Table 8:

Additional regulatory information – bioresources

Introduction

The information in this section details 'Additional regulatory information- bioresources' as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables:

[**Pro forma 8A**](#) Bioresources sludge data for the 12 months ended 31st March 2022

[**Pro forma 8B**](#) Bioresources operating expenditure analysis for the 12 months ended 31st March 2022

[**Pro forma 8C**](#) Bioresources energy and liquors analysis for the 12 months ended 31st March 2022

[**Pro forma 8D**](#) Bioresources sludge treatment and disposal data for the 12 months ended 31st March 2022

Table 8A

Bioresources sludge data for the 12 months ended 31 March 2022

Line description	Units	DPs	Total	RAG 4 reference
Total sewage sludge produced, treated by incumbents	ttds/year	1	143.1	8A.1
Total sewage sludge produced, treated by 3rd party sludge service provider	ttds/year	1	0.0	8A.2
Total sewage sludge produced	ttds/year	1	143.1	8A.3
Total sewage sludge produced from non-appointed liquid waste treatment	ttds/year	1	6.2	8A.4
Percentage of sludge produced and treated at a site of STW and STC co-location	%	2	69.73	8A.5
Total sewage sludge disposed by incumbents	ttds/year	1	100.5	8A.6
Total sewage sludge disposed by 3rd party sludge service provider	ttds/year	1	0.0	8A.7
Total sewage sludge disposed	ttds/year	1	100.5	8A.8
Total measure of intersiting 'work' done by pipeline	ttds*km/year	0	2	8A.9
Total measure of intersiting 'work' done by tanker	ttds*km/year	0	814	8A.10
Total measure of intersiting 'work' done by truck	ttds*km/year	0	1,145	8A.11
Total measure of intersiting 'work' done (all forms of transportation)	ttds*km/year	0	1,961	8A.12
Total measure of intersiting 'work' done by tanker (by volume transported)	m ³ *km/yr	0	29,808,570	8A.13
Total measure of 'work' done in sludge disposal operations by pipeline	ttds*km/year	0	0	8A.14
Total measure of 'work' done in sludge disposal operations by tanker	ttds*km/year	0	0	8A.15
Total measure of 'work' done in sludge disposal operations by truck	ttds*km/year	0	4,492	8A.16
Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttds*km/year	0	4,492	8A.17
Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	m ³ *km/yr	0	0	8A.18
Chemical P sludge as % of sludge produced at STWs	%	2	4.20	8A.19

8A.1-3: This section of the data table shows how much sludge our wastewater produces and treats over the year ending 31 March 2022.

8A.4: This data shows the total sludge from non-appointed liquid waste treatment. It covers all sewage sludge treatment imported into Yorkshire water in another means rather than direct by the sewer.

This is made up of 3 elements:

- Tankered Trade Effluent (General- from Domestic and Trade imports)
- Tankered Trade Effluent (Nufarm)
- Trade via 'Private pipe' Syngenta.

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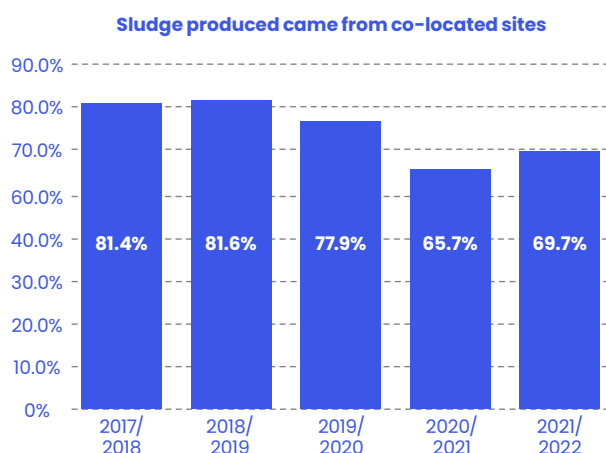
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8A.5: This year 69.73% of our total sludge produced came from co-located sites. You can see below how this has trended over the past five years:



8A.6: The data reflects an increase in disposal from the previous year. This is due to the Huddersfield anaerobic digestion plant being built, commissioned, certified by BAS (Biosolids Assurance Scheme) and commencement of recycling to agriculture.

8A.7: This reported data reflects the increased in-house digestion capacity.

8A.9-13: The below chart shows how the trend over the past five years:

Data Item	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
8A.9	0	0	0	2	2
8A.10	776	804	973	878	814
8A.11	6,683	4,200	1,726	1,602	1,159
8A.12	23,199,114	29,236,120	32,220,066	27,866,810	29,808,570

Much of the reduction seen within the 8A.11 is due to the opening of additional digester plants resulting in cake being transported shorter distances. This can clearly be seen at Copley and Huddersfield which benefitted by the Huddersfield Sewage Treatment Facility (STF) opening.

8A.16: This data reflects an increase in the work carried out by truck due to the continuation of recycling legacy materials to land reclamation in Leeds. In addition to this, further distances have been travelled to for agricultural work done, whereby locations which are suitable for Spring crops have been utilised as a result of the Farming Rules for Water Legislation. A further contributing factor is due to Huddersfield STF and Mitchell Laithes WwTW being in areas with minimal landbank in the surrounding areas meaning further travelling distance.

8A.19: 4.20% of our total sludge produced came from wastewater treatment works which use chemical dosing for phosphate removal. These sites are all chemically dosed to remove phosphorus. This is a decrease from the previous year's 4.25%.

Table 8B**Bioresources operating expenditure analysis for the 12 months ended 31 March 2022**

Line description	Units	DPs	Pipeline	Tanker	Truck	Total	RAG 4 reference
Sludge transport method							
Power	£m	3	0.000	0.004	0.000	0.004	8B.1
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	8B.2
Discharge consents	£m	3	0.000	0.000	0.000	0.000	8B.3
Bulk discharge	£m	3	0.000	0.000	0.000	0.000	8B.4
Other operating expenditure							
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	8B.5
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	8B.6
Other operating expenditure excluding renewals	£m	3	0.000	7.602	0.000	7.602	8B.7
Total functional expenditure	£m	3	0.000	7.606	0.000	7.606	8B.8
Local authority and Cumulo rates	£m	3	0.000	0.006	0.000	0.006	8B.9
Total operating expenditure (excluding 3rd party)	£m	3	0.000	7.612	0.000	7.612	8B.10

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 8B – Continued**Bioresources operating expenditure analysis for the 12 months ended 31 March 2022**

Line description	Units	DPs	Untreated Sludge	Raw Sludge liming	Conventional AD	Incineration of raw sludge	Photo- conditioning/ composting	Advanced Anaerobic Digestion	Other	Total	RAG 4 reference
Sludge treatment type											
Power	£m	3	0.000	0.098	-4.703	0.000	0.000	-0.858	0.000	-5.463	8B.11
Income treated as negative expenditure	£m	3	0.000	0.000	-1.657	0.000	0.000	-0.769	0.000	-2.426	8B.12
Discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.13
Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.14
Other operating expenditure											
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.15
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.16
Other operating expenditure excluding renewals	£m	3	0.000	1.307	12.662	0.000	0.000	4.125	0.000	18.094	8B.17
Total functional expenditure	£m	3	0.000	1.405	6.302	0.000	0.000	2.498	0.000	10.205	8B.18
Local authority and Cumulo rates	£m	3	0.000	0.103	1.002	0.000	0.000	0.326	0.000	1.431	8B.19
Total operating expenditure (excluding 3rd party)	£m	3	0.000	1.508	7.304	0.000	0.000	2.824	0.000	11.636	8B.20

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Table 8B – Continued

Bioresources operating expenditure analysis for the 12 months ended 31 March 2022

Line description	Units	DPs	Landfill, raw	Landfill, partly treated	Land restoration/reclamation	Sludge recycled to farmland	Incineration of digested Sludge	Other	Total	RAG 4 reference
Sludge disposal route										
Power	£m	3	0.000	0.000	0.000	0.001	0.000	0.000	0.001	8B.21
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.22
Discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.23
Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.24
Other operating expenditure										
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.25
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8B.26
Other operating expenditure excluding renewals	£m	3	0.000	0.000	0.426	8.767	0.000	0.000	9.193	8B.27
Total functional expenditure	£m	3	0.000	0.000	0.426	8.768	0.000	0.000	9.194	8B.28
Local authority and Cumulo rates	£m	3	0.000	0.000	0.000	0.001	0.000	0.000	0.001	8B.29
Total operating expenditure (excluding 3rd party)	£m	3	0.000	0.000	0.426	8.769	0.000	0.000	9.195	8B.30

This table is a disaggregation of [Table 4E](#) bioresources costs into sludge treatment, transport, and disposal, and reconciles to line 11.

To allocate the sludge treatment costs, all relevant assets were classified according to the tables in line with RAG 4.10, with sludge treatment costs directly allocated by site where possible into the relevant treatment categories (Untreated Sludge, Conventional & Advanced).

Total operating cost for bioresources price control has decreased in 2021/2022, for more information on year on year variances refer to the commentary for [Table 4E](#).

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 8C**Bioresources energy and liquors analysis for the 12 months ended 31 March 2022**

			Electricity	Heat	Biomethane	Total	Electricity	Heat	Biomethane	Total	RAG 4 reference	
Line description	Units	DPs	MWh (0 DPs)	MWh (0 DPs)	MWh (0 DPs)	MWh (0 DPs)	£m (3 DPs)	£m (3 DPs)	£m (3 DPs)	£m (3 DPs)		
Energy												
Energy consumption - bioresources											11.415	8C.1
Energy generated by and used in bioresources control			14,743	120,259	0	135,002	2.021	8.909	0.000	10.930	8C.2	
Energy generated by bioresources and used in Network+ control			68,644	0	0	68,644	9.412	0.000	0.000	9.412	8C.3	
Energy generated by bioresources and exported to the grid or third party			3,524	0	0	3,524	0.490	0.000	0.000	0.490	8C.4	
Energy generated by bioresources that is unused			0	141,848	0	141,848					8C.5	
Energy bought from grid or third party and used in bioresources control			5,492	40,790	0	46,282	0.753	2.514	0.000	3.267	8C.6	
Income from renewable energy subsidies	Unit	DPs	Value									
Income claimed from Renewable Energy Certificates (ROCs)	£m	3	-2.426									8C.7
Income claimed from Renewable Heat Incentives (RHIs)	£m	3	0.000									8C.8
Income claimed from [other renewable energy subsidy (1)]	£m	3	0.000									8C.9
Income claimed from [other renewable energy subsidy (2)]	£m	3	0.000									8C.10
Income claimed from [other renewable energy subsidy (3)]	£m	3	0.000									8C.11
Total income claimed from renewable energy subsidies	£m	3	-2.426									8C.12
% of total number of renewable energy subsidies due to expire in the next 2 financial years	%	0	0%									8C.13
This year's value of renewable energy subsidies due to expire in the next 2 financial years	£m	3	0.000									8C.14

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Please refer to RAG 4.10 – Guideline for the table definitions in the annual performance report

Table 8C – Continued**Bioresources energy and liquors analysis for the 12 months ended 31 March 2022**

Income from renewable energy subsidies	Unit	DPs	Value									
BOD load of liquor or partially treated liquor returned from bioresources to Network+	kg/d	0	18,400									8C.15
Ammonia load of liquor or partially treated liquor returned from bioresources to Network+	kg Amm-N/d	0	4,655									8C.16
Recharge to Bioresources by Network+ for costs of handling and treating bioresources liquors	£m	3	2.965									8C.17
			Electricity	Heat	Biomethane	Total	Electricity	Heat	Biomethane	Total		
Line description	Units	DPs	MWh (0 DPs)	MWh (0 DPs)	MWh (0 DPs)	MWh (0 DPs)	£m (3 DPs)	£m (3 DPs)	£m (3 DPs)	£m (3 DPs)	RAG 4 reference	
Energy (AMP 7 shadow reported values)												
Energy consumption - bioresources											11.415	8C.18
Energy generated by and used in bioresources control			14,743	120,259	0	135,002	2.021	8.909	0.000	10.930	8C.19	
Energy generated by bioresources and used in Network+ control			68,644	0	0	68,644	9.412	0.000	0.000	9.412	8C.20	
Energy generated by bioresources and exported to the grid or third party			3,524	0	0	3,524	0.490	0.000	0.000	0.490	8C.21	
Energy generated by bioresources that is unused			0	141,848	0	141,848					8C.22	
Energy bought from grid or third party and used in bioresources control			5,492	40,790	0	46,282	0.753	2.514	0.000	3.267	8C.23	
%												
Percentage of bioresources energy consumption that is metered			0.000%									8C.24

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Electricity: Of the 86.9GWh (up from 75 GWh last year) combined heat & power (CHP) electrical generation which is generated within the Bioresources price control; 17% was within bioresources, exporting 79% of the energy to Networks+ and 4.1% of energy to the National Grid.

The increase in exported electricity to the National Grid is due to our new anaerobic digester plant at Huddersfield.

5.5GWh (a reduction of 1.5GWh from previous year) of electricity was purchased from the grid for bioresources. The reduction of purchased electricity reflects the increase of CHP generation.

This table helps the industry ensure there is consistency for energy and liquor treatment in bioresources.

8C.1: We have used total costs for energy consumption within bioresources, and an allowance has been added for overheads and fleet costs.

8C.2-6: We have used the volumetric data within this table and applied a market unit price for calculating the electricity and heat financials.

A different unit rate has been used for electricity generated by bioresources and exported to the grid or third party (line 8C.4).

We have assumed any heat generated in bioresources was from biogas. As a result, we have applied the same unit price of natural gas that we purchase this at, where it is required in the business.

8C.7: This line is the same as 4K.2 for income treated a negative expenditure for bioresources only.

8C.15: The biochemical oxygen demand load (settled) of sludge liquor or partially treated liquor returned from bioresources to network was found to be 18,400 kilogram per day (kgBOD5/d).

8C.16: The Ammonia load of sludge liquor or partially treated liquor returned from bioresources to network was found to be 4655 kilogram per day (kgNH4-N/d). Last year we had 5488 kilogram per day (kgNH4-N/d), a variance of 833 kg/day.

8C.17: We have worked closely with Jacobs in order to quantify the cost of sludge liquor treatment.

Following consultation with the operational business we have used Biochemical Oxygen Demand (BOD) and ammonia as our determinants.

$$C = W \frac{(BOD_i + 4.75A_i)V}{(BOD_h + 4.75A_h)I}$$

Operating costs associated with 2021/2022 and capital expenditure has been annualised from the Modern Equivalent Asset Value (MEAV) only for assets which are impacting liquors within the wastewater Network+ price control. There has been a decrease in costs from 2020/2021 due to increased focus on our sampling programme of return liquors.

8C.18-23: The AMP7 shadow reported values are the same as 8C.1-6.

Table 8D**Bioresources sludge treatment and disposal data for the 12 months ended 31 March 2022**

Line description	Units	DPs	By incumbent	By 3rd party sludge service providers	RAG 4 reference
Sludge treatment process					
% Sludge - untreated	%	1	1.4%	0.0%	8D.1
% Sludge treatment process - raw sludge liming	%	1	0.0%	0.0%	8D.2
% Sludge treatment process - conventional AD	%	1	80.7%	0.0%	8D.3
% Sludge treatment process - advanced AD	%	1	17.9%	0.0%	8D.4
% Sludge treatment process - incineration of raw sludge	%	1	0.0%	0.0%	8D.5
% Sludge treatment process - other (specify)	%	1	0.0%	0.0%	8D.6
% Sludge treatment process - Total	%	1	100.0%	0.0%	8D.7
(Un-incinerated) sludge disposal and recycling route					
% Sludge disposal route - landfill, raw	%	1	0.0%	0.0%	8D.8
% Sludge disposal route - landfill, partly treated	%	1	0.0%	0.0%	8D.9
% Sludge disposal route - land restoration/reclamation	%	1	23.8%	0.0%	8D.10
% Sludge disposal route - sludge recycled to farmland	%	1	76.2%	0.0%	8D.11
% Sludge disposal route - other (specify)	%	1	0.0%	0.0%	8D.12
% Sludge disposal route - Total	%	1	100.0%	0.0%	8D.13

8D.1-7: Across the previous asset management period (AMP), Yorkshire Water's strategic direction was to decommission the incinerators to promote renewable biogas production from anaerobic digestion, reducing the cost of treatment and improving environmental performance. Yorkshire Water no longer incinerate or raw lime sludge.

8D.10: There was an increase in the disposal route to land reclamation. This is due to the majority of the legacy material being recycled for land reclamation during this reporting year.

98.6% of Yorkshire Water's sludge was treated via digestion (both advanced and normal). This is up 0.6% from the previous year. This improvement is down to the commissioning of Huddersfield anaerobic digesters, which brings additional capacity. Untreated sludge is down from 1.7% to 1.4%. Third-party treatment has dropped from 0.2% to 0.01%.

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Table 9: Additional regulatory information – innovation competition

Introduction

The information in this section details ‘Additional regulatory information– innovation competition’ as required by Ofwat, with a brief description of significant variances compared to previous years. The information in this section comprises the following tables:

Pro forma 9A Innovation competition



Table 9A
Innovation competition

Line description	Units	DPs	Current year	RAG 4 reference
Allowed				
Allocated innovation competition fund price control revenue	£m	3	3.819	9A.1
Revenue collected for the purposes of the innovation competition				
Innovation fund income from customers	£m	3	3.819	9A.2
Income from customers to fund innovation projects the company is leading on	£m	3	0.000	9A.3
Income from other water companies to fund innovation projects the company is leading on	£m	3	0.000	9A.4
Income from customers that is transferred to other companies as part of the innovation fund	£m	3	0.235	9A.5
Non-price control revenue (e.g. royalties)	£m	3	0.000	9A.6

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Table 9A – Continued
Innovation competition

Line description	Total amount of funding awarded to the lead company through the innovation fund	Forecast expenditure on innovation fund projects in year (excl 10% partnership contribution)	Actual expenditure on innovation fund projects in year (excl 10% partnership contribution)	Difference between actual and forecast expenditure	Forecast project lifecycle expenditure on innovation fund projects (excl 10% partnership contribution)	Cumulative actual expenditure on innovation fund projects (excl 10% partnership contribution)	Difference between actual and forecast expenditure	Allowed future expenditure on innovation fund projects	In year expenditure on innovation projects funded by shareholders	Cumulative expenditure on innovation projects funded by shareholders	RAG 4 reference
Units DPs	nr 0	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	
Innovation project 1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.7
Innovation project 2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.8
Innovation project 3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.9
Innovation project 4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.10
Innovation project 5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.11
Innovation project 6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.12
Innovation project 7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.13
Innovation project 8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.14
Innovation project 9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.15
Innovation project 10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.16
Innovation project 11	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.17
Innovation project 12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.18
Innovation project 13	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.19
Innovation project 14	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.20
Innovation project 15	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.21
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9A.22
Administration											
Administration charge for innovation partner	0.173										9A.23

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Statement on innovation competition

Ofwat established the £200 million Innovation Fund to stimulate more rapid adoption of transformational innovation within the water sector and encourage greater collaboration between companies.

The Fund utilises money collected directly from customers by water companies who hold and distribute to winning bids in competitions held by OFWAT and their partners Nesta. The first three competitions were held during 2021/2022: Innovation in Water Challenge, Water Breakthrough Challenge, and the Water Breakthrough Challenge 2 (WBC2) which closed in February 2022. Yorkshire Water submitted three bids to the first two rounds that were not successful but did support six bids that were. Yorkshire Water developed one new bid for WBC2, resubmitted a previously unsuccessful bid that was invited to reapply and supported a further 2. The winning bids will be announced in April 2022. In terms of reporting for the 2021/2022 APR, we prioritised the introduction and validating of systems to develop, approve and track applications to the fund. If the bids led by Yorkshire Water in WBC2 are successful further financial processes will be developed, tested and reported for APR 2022/2023.

Table 11: Additional regulatory information – Greenhouse gas emissions

Introduction

The information in this section details 'Additional regulatory information – Greenhouse gas emissions' as required by Ofwat. The information in this section comprises the following tables:

Pro forma 11A Operational greenhouse gas emissions reporting for the 12 months ended 31 March 2022



Table 11A**Operational greenhouse gas emissions reporting for the 12 months ended 31 March 2022**

		Water	Wastewater	Total	RAG 4 reference
Line description	DPs	tCO2e	tCO2e	tCO2e	
Scope one emissions					
Burning of fossil fuels	3	1,159.380	10,754.360	11,913.740	11A.1
Process and fugitive emissions	3	-	68,488.330	68,488.330	11A.2
Vehicle transport	3	3,288.620	4,932.930	8,221.550	11A.3
Total scope one emissions	3	4,448.000	84,175.620	88,623.620	11A.4
Scope one emissions; GHG type CO ₂	3	4,398.780	15,445.340	19,844.120	11A.5
Scope one emissions; GHG type CH ₄	3	2.060	35,644.470	35,646.530	11A.6
Scope one emissions; GHG type N ₂ O	3	47.150	33,085.820	33,132.970	11A.7
Scope two emissions					
Purchased electricity – location based	3	71,032.250	64,313.060	135,345.310	11A.8
Purchased electricity – market based	3	0.280	0.410	0.690	11A.9
Purchased heat	3	-	-	-	11A.10
Electric vehicles	3	0.260	0.400	0.660	11A.11
Removal of electricity to charge electric vehicles at site	3	-	-	-	11A.12
Total scope two emissions (location based)	3	71,032.790	64,313.870	135,346.660	11A.13
Scope two emissions; GHG type CO ₂	3	70,471.140	63,805.190	134,276.330	11A.14
Scope two emissions; GHG type CH ₄	3	180.640	163.550	344.190	11A.15
Scope two emissions; GHG type N ₂ O	3	380.730	344.720	725.450	11A.16
Scope three emissions					
Business travel	3	147.630	221.450	369.080	11A.17
Outsourced activities	3	1,655.660	6,253.950	7,909.610	11A.18
Purchased electricity; transmission and distribution – location based	3	6,030.520	5,460.070	11,490.590	11A.19
Purchased electricity; transmission and distribution – market based	3	-	-	-	11A.20
Purchased heat; transmission and distribution	3	-	-	-	11A.21
Total scope three emissions (location based)	3	7,833.810	11,935.470	19,769.280	11A.22
Scope three emissions; GHG type CO ₂	3	7,761.020	11,695.440	19,456.460	11A.23
Scope three emissions; GHG type CH ₄	3	14.820	122.410	137.230	11A.24
Scope three emissions; GHG type N ₂ O	3	57.970	117.620	175.590	11A.25
Gross operational emissions (Scope 1,2 and 3)					
Gross operational emissions – location based	3	83,314.310	160,424.550	243,738.860	11A.26
Gross operational emissions – market based	3	5,561.780	88,968.850	94,530.630	11A.27

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Table 11A – Continued**Operational greenhouse gas emissions reporting for the 12 months ended 31 March 2022**

		Water	Wastewater	Total	RAG 4 reference
Line description	DPs	tCO2e	tCO2e	tCO2e	
Emissions reductions					
Exported renewables (market based)	3			-1,389.500	11A.28
Exported biomethane (market based)	3	-	-	-	11A.29
Green tariff electricity offsets	3			135,346.660	11A.30
Other emissions reductions	3			13,861.380	11A.31
Total emissions reductions	3			147,818.540	11A.32
Net annual emissions					
Net annual emissions - location based	3	81,924.620	160,424.550	242,349.170	11A.33
Net annual emissions - market based	3	5,561.780	88,968.850	94,530.630	11A.34
Net annual emissions	3			94,530.630	11A.35
		Water	Wastewater		
Line description	DPs	kgCO ₂ e/MI	kgCO ₂ e/MI		
GHG intensity ratios					
Emissions per MI of treated water	3	198.290			11A.36
Emissions per MI of sewage treated (flow to full treatment)	3		224.480		11A.37
Emissions per MI of sewage treated (water distribution input)	3		502.800		11A.38

For more information on our Greenhouse gas emissions, please [click here](#).

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5. Meeting our licence conditions

Statement on sufficiency of financial
resources and facilities

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Statement on sufficiency of financial resources and facilities

Regulatory ring-fencing certificate

In line with the requirements in Condition P of the Yorkshire Water Services Instrument of Appointment (May 2022), the Board of Directors (the Board) confirm that:

1. Yorkshire Water Services Limited (Yorkshire Water) shall at all times act in the manner best calculated to ensure that it has adequate: financial resources and facilities; management resources; and systems of planning and internal control, to enable it to secure the carrying out of the Regulated Activities including the investment programme necessary to fulfil its obligations under the Appointment(s) and that in accordance with Condition P:
2. in the opinion of the Board, Yorkshire Water has available to it sufficient financial resources and facilities to enable it to carry out, for at least the next 12 months, the Regulated Activities (including the investment programme necessary to fulfil Yorkshire Water's obligations under the Appointment(s)); and
3. in the opinion of the Board, Yorkshire Water will, for at least the next 12 months, have available to it:
 - (a) financial resources and facilities (Condition P section 12.1);
 - (b) management resources (P12.2);
 - (c) systems of planning and internal control (P12.3); and
 - (d) rights and resources other than financial resources (P14)

which are sufficient to enable it to carry out those functions as required by paragraph 1 above.

In making this declaration, the Directors have taken into account the following key areas:

Financial resources and facilities

This area is supported by a detailed going concern review, which has considered:

- The company's business activities, together with the factors likely to affect its future development and performance, as described in the Strategic Report within the Yorkshire Water Annual Report and Financial Statements (ARFS);
- The company's cash position including available cash and committed undrawn bank facilities, headroom, and details of refinancing activity;
- The company's available funds to cover operating and capital investment activities of the company for the twelve months from the date of signing the Financial Statements;
- Compliance with covenants associated with the company's securitised financing arrangements;
- The company's business plan for the remaining period within AMP7; and
- The impact of wider factors on operations and business performance, for example climate change and macroeconomic challenges such as the increased pressure on household income.

Detail of the going concern review is shown within note 1 of the Yorkshire Water ARFS for the year ended 31 March 2022. In addition, the company has completed a comprehensive long-term viability assessment for the eight years to 31 March 2030, details of which are shown in the ARFS for the year ended 31 March 2022. The long-term viability statement has been prepared in line with Ofwat's Information Notice (IN) 19/07 – Expectations for companies in issuing long-term viability statements.

Further information detailing our credit ratings and financing arrangements is shown in the ARFS within the section titled 'Our financial performance'. At 31 March 2022, Yorkshire Water had one rating monitored (S&P Class A) only since the Moody's Corporate Family Rating was withdrawn last year.

Since 31 March 2022 Ofwat has notified us in writing that it is now monitoring the Moody's Class A rating along with the S&P rating.

The banking arrangements of the company operate on a pooled basis with other members of the Yorkshire Water Financing Group, and the bank balances of each subsidiary can be offset against each other. The company had guaranteed bonds with Yorkshire Water Services Finance Limited and Yorkshire Water Finance plc at 31 March 2022 as detailed in note 24 to the ARFS.

Amounts owed to group and subsidiary companies are detailed in notes 15, 16 and 17 of the ARFS.

Management resources

We have applied good governance principles in the way in which the Board and its supporting committees operate. We have reported on how we have complied with the UK Corporate Governance Code, the Ofwat Board Leadership, Transparency and Governance Principles and the Wates Corporate Governance Principles for Large Private Companies. This information can be found in [Section 6](#) of the APR and in the Governance Report of the ARFS.

The ARFS also includes reports from board committees reporting to the Board on management activities and resources in the following areas:

- Nomination Committee;
- Public Value Committee;
- Safety, Health and Environment Committee;
- Audit and Risk Committee; and
- People and Remuneration Committee.

The 'Putting people first' section of the ARFS discusses our processes for:

- Health, safety and well-being of our colleagues;
- Attracting great people and maintaining the skills we need; and
- Equality, diversity and inclusion.

Attracting and maintaining the talent and culture required to achieve our objectives is considered a principal risk. Processes to mitigate this risk and assurance in this area are discussed within the section titled 'Managing risks and uncertainties' in the ARFS.

The company's employment policies and strategy are described in detail in the Directors' report – other disclosures section of the ARFS. This section also discusses our Colleague Engagement Forum at which nominated and selected colleagues represent their business areas at a company level on a wide range of topics, including remuneration. At least one Board member attends each Forum meeting and then provides first-hand feedback to the Board, along with the minutes from the Forum being provided in the Board papers each time. Regular colleague engagement surveys are undertaken, with the resulting colleague engagement score forming part of the measures of the Executive Incentive Plan for Executive Directors and senior management.

The balance of management skills and recruitment processes at Board level are considered by our Nomination Committee and are discussed in the Directors' Report and in the Nomination Committee Report, both contained within the ARFS. Succession planning for Yorkshire Water directors and other senior executives is within the remit of the Nomination Committee and the People and Remuneration Committee and is highlighted in the Nomination Committee Report and the Directors Remuneration Report contained within the ARFS.

Independence of the independent non-executive directors is reviewed annually by the Board as noted in the Governance section of the ARFS. The Board believe that all directors remain wholly independent in relation to the Corporate Governance Code at the date of approval of the ARFS.

Systems of planning and internal control

The Audit and Risk Committee monitors the design and operation of Yorkshire Water's system of internal control on behalf of the Board. Our controls are designed to achieve compliance with obligations and manage the risk of failing to achieve the business objectives we have agreed with our customers and our regulators. The operational policies and procedures which set out these controls are contained within the Integrated Management System, or similar repositories, and achieve international quality standards for Environmental Management, Quality Management, Occupational Health and Safety and Asset Management. The key financial policies, procedures and controls to ensure we meet all our statutory and regulatory obligations and remain resilient are set out in the ARFS.

Three lines of assurance work together to ensure that there is adequate and proportionate coverage across the whole control environment, including all principal risks and business processes, and provide confidence to senior leaders and other stakeholders over the adequacy of the design and operation of the controls. The outcome from this integrated assurance is reported to the risk owners to inform decision making.

The achievement of actions to address identified control weaknesses is monitored by the Yorkshire Water Leadership Team and the Audit and Risk Committee.

The company's risk management process reviews, monitors and reports on the company's risks and mitigating controls. The Board defines the risk it is willing to take to achieve its objectives in the risk appetite statement. It balances risk, the cost of control and the long-term viability of the company. It monitors the achievement of this risk appetite six-monthly using a suite of agreed key risk indicators. Financial risk is at the heart of this process.

Throughout the year the Board takes an active role in reviewing operational incidents by challenging management in understanding key lessons. The lessons and learning are used to enhance processes and support future investment plans to target issues as part of a continual improvement process.

The long-term viability statement at 31 March 2022 covers an eight-year period to the end of AMP8. Yorkshire Water's risks and mitigating controls are detailed within the section 'Managing risks and uncertainties' in the ARFS.

Other policies relating to this area are discussed in the ARFS as follows:

- Ethical behaviour, anti-corruption, and anti-bribery (see the section 'Putting people first' in the ARFS).
- 'Speak Up', including our whistleblowing policy is reviewed by the Audit and Risk Committee and approved by the Board annually (see the Audit and Risk Committee report within the ARFS).

Detail on how the Board sets ambitions, how we monitor performance and make decisions, how we involve our customers and stakeholders, and how we change and update our commitments is provided in the Board Statement on Company Direction and Performance, as published within the APR.

Rights and resources other than financial resources

We launched our purpose, ambition and values in March 2020, following a significant piece of work with our colleagues, customers, directors, shareholders and other stakeholders. The Board was heavily involved throughout this process and gave approval to the final version prior to its launch. During the year we have launched our Yorkshire Water Code of Ethics which provides further support to colleagues on how to ensure that they are always doing the right thing and where to go for help and advice if they are faced with an ethical decision as part of their work. This was reviewed and signed off by the Board prior to launch and has been accompanied by mandatory online learning for all colleagues to ensure that they have understood the Code of Ethics and how it applies to them.

The Board has also been closely involved in the setting of our strategic vision during the year, with individual Board members participating in discussions around the strategy and information being supplied to the Board at regular intervals on how the strategy was being developed, including information on external dynamics and long-term considerations. This culminated in a Board workshop in September 2021 at which the strategy was presented and discussed. This work will be taken forward to completion following the appointment of our new CEO.

Our company purpose sets out what we are here to do and is now defined as, "We're proud to play water's role in making Yorkshire a brilliant place to be – now and always"

Our company vision is 'Putting people at the heart of everything we do'. This reflects our awareness that customers, colleagues, and stakeholders should be at the heart of all we do and reflects the sense of social purpose that is felt across the business, including at Board level.

The Governance section of the ARFS further describes the company's purpose, vision, values, and desired behaviours. As noted above, we undertake an annual Board evaluation to consider the effectiveness of our Board. In 2021/2022 this has been an externally facilitated evaluation, undertaken by Lintstock Ltd, who are entirely independent from Yorkshire Water.

The results of this evaluation, and our goals for the coming year are described in the ARFS.

In 2021/2022 our CEO indicated that she was considering retiring from the business. Spencer Stuart were engaged to draw up a list of candidates which was then reviewed by the Nomination Committee, with Committee members all meeting with the preferred candidate as part of the interview process. The Board then approved the recommendation to appoint our new CEO, who joined the business on 9 May 2022.

As noted last year, in 2021, a comprehensive recruitment process was undertaken to seek a new Chair of the Yorkshire Water Board. The existing Board Chair, having served for nine years, would cease to be independent under the UK Corporate Governance Code. The recruitment process resulted in the appointment of a new independent non-executive director on 1 July 2021 who then stepped up to become the Chair of the Board later in 2021 upon the retirement of the previous Chair.

The Asset Strategy and Planning team assures that the design and build of assets meets our future needs and quality standards. Our 'Love our environment' section in the ARFS details how we will adapt our assets and services to the climate change we can reasonably expect in the future based on latest expert analysis to ensure our service remains resilient.

Our investment and operating strategies fully embrace totex decision making approaches through the use of our Decision Making Framework. This system enables us to identify the best 'whole life' investment options and to understand best value and least cost approaches so we can seek to maximise socio-economic and environmental benefits through our six capitals approach. Alongside this we also assess our impact on Yorkshire using the six capitals approach. Our latest assessment of our impact is published in a report called

and reviews the 2021 reporting year. This is our third report of this type and builds on the previous version using new techniques and data.

The report shows the strong net positive contribution Yorkshire Water delivers for society, and it highlights further areas where we have risk and opportunity needing further attention. The fourth report, reviewing the 2022 reporting year, will be published in October 2022.

Our Insurance team also works to ensure that we manage and mitigate our exposure to costs from public liabilities and damage to our assets.

Contracting

Our Business Investment Committee (BIC), governs the effective and efficient delivery of our investment programmes to deliver best value for customers and the business. The committee oversees all totex expenditure in line with the Board approved five-year plan.

Our sustainable procurement strategy sets out our objective to ensure the resilience of our supply chain and enables us to provide our services to customers in the long-term. This is discussed in the 'Putting people first' section of the ARFS.

Transactions with associated companies and checks that these contracts comply with licence requirements are detailed within [Section 7](#) of this APR.

Compliance with the licence provision on cross-subsidies between Yorkshire Water and associated companies is detailed within the Accounting Separation Methodology Statement, which is published on the Yorkshire Water reports webpage, and within the transfer pricing disclosures in the APR.

All contracts entered into between the Appointee and any Associated Company include the necessary provisions and requirements in respect of the standard of service to be supplied to the Appointee, to ensure that it is able to carry out the Regulated Activities.

Ensuring best value is achieved through the supply chain is a key focus at Yorkshire Water. The Commercial Team have led a transformation in the way in which sourcing and contract management is executed.

This has involved the onboarding of a specialist partner, the creation of a structured gated process for sourcing and a real focus on achieving savings for the business against its baseline spend. Additional focus has been placed on lower value spend, often termed tail spend, with a dedicated team that ensures that not only do colleagues get quick access to the suppliers they need but that sound commercial agreements are made. In contract management there is a structured categorisation of suppliers related to their risk and value which ensures the appropriate level of oversight is given to drive value.

We continue to assess our projects within programme delivery to ensure that we appropriately consider the potential use of markets and Direct Procurement for Customers (DPC) against the established delivery routes. Significant efficiencies are being realised through strategic planning. We seek to remove the need to build solutions through alternative approaches including operational changes.

Material issues or circumstances

In addition to the risk management processes in section 'Managing risks and uncertainties' of the ARFS, an extensive risk assessment was undertaken of the full range of principal and emerging risks faced by the company as part of our going concern and long-term viability assessment processes. Detail of our long-term viability review can be found in the ARFS.

The Audit and Risk Committee reviewed the principal risks facing the business at the March 2022 committee meeting, as detailed in our Audit and Risk Committee Report of the ARFS. A detailed paper on going concern was considered at the Audit and Risk Committee meeting on 16 June 2022, and updated information presented on 4 July 2022 prior to final Board approval of the ARFS. Detail of the going concern review is shown within the note 1 of the ARFS.

Cyber security remains our top recorded risk. This has been exacerbated by the invasion of in Ukraine and the global escalation in cyber-attacks. The risk section in the ARFS sets out the mitigation in place. In addition, we are investing in a Security Operations Centre to improve the efficiency and effectiveness of our controls.

Climate change remains a key risk. We face extreme weather events with increased frequency. In the course of this financial year we faced a series of winter storms, that impacted our operations, most notably Storm Arwen, which brought high winds and significant power outages to our region. We continue to work in partnership with other agencies as well as investing through our capital programme to mitigate the impact of torrential rain and flooding. Our ongoing focus on our work in this area is detailed in the Disclosing our climate change risks and strategy section of the ARFS, which includes our TCFD (Taskforce on Climate-related Financial Disclosures) reporting, setting out how we assess and manage our priority climate risks and opportunities and how these are governed and reported.

As noted in the ARFS our strong risk management processes enabled us to swiftly map the potential impact of the myriad threats arising from the Russian invasion of Ukraine and shape mitigation, monitoring arrangements and triggers for escalation. We continue to monitor and respond to the combined impact of COVID-19, Brexit and Ukraine on the economy, the cost of living, the supply chain and the availability of key skills and capabilities. However, taking into account the strength of the mitigations available, the directors consider that the company is well placed to successfully manage its business risks and meet the requirements of the regulatory ring-fencing certificate.

Statement approval

This statement has been prepared in accordance with IN 20/01 – Requirements and expectations for ring-fencing certificates, as directed by IN 21/01 – Expectations for monopoly company annual performance reporting 2021/2022.

This statement, and supporting evidence, has been reviewed by the external financial auditors, Deloitte, as part of the annual audits of Yorkshire Water's statutory accounts and regulatory accounts. The audit opinion from Deloitte is published within the APR and a report from Deloitte has been provided to Ofwat on this matter.

In approving this statement, the Board has considered a wide range of factors to take a holistic view of the risks the business faces. The Board has considered feedback from the Audit and Risk Committee on the controls and processes in place for the development of this Ring-Fencing Certificate and the supporting evidence. At the Board meeting on 5 July 2022, the Board approved this Ring-Fencing Certificate.



Kathy Smith
Company Secretary

Signed for and on behalf of the Board of Directors of Yorkshire Water Services Ltd

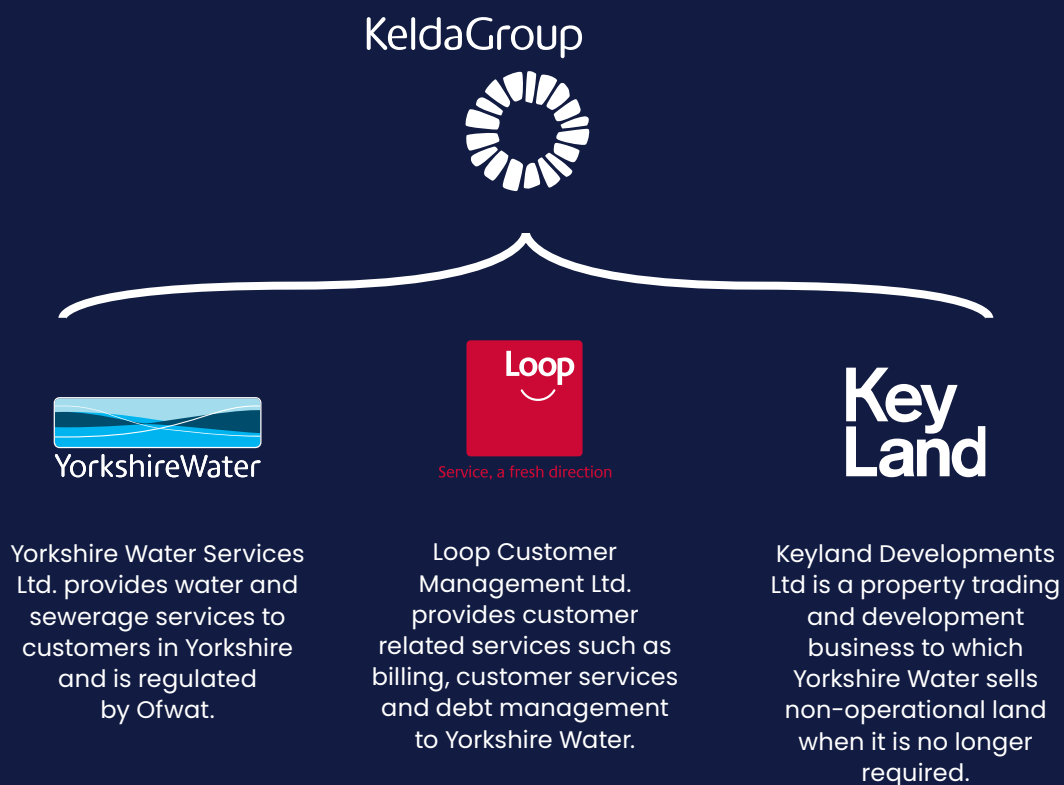
6. Board, leadership, transparency and governance

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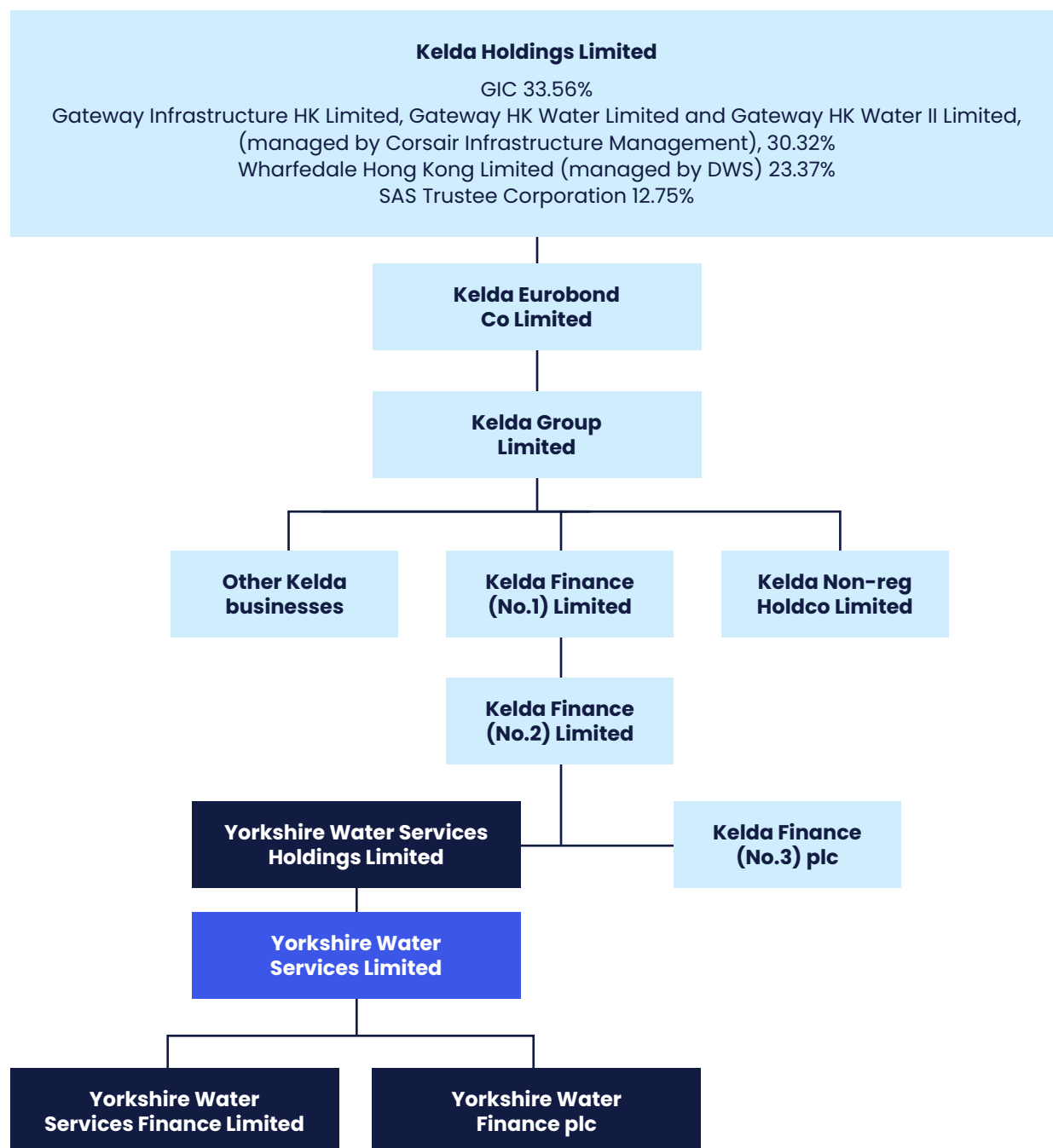
Our company structure

Yorkshire Water sits within the Kelda group, which is privately owned. The Kelda group is made up of several businesses and Kelda Holdings Limited (the top holding company) is owned by a group of investment companies.

The diagram below shows a high-level structure of the group and the companies.



The diagram below shows the full Kelda group corporate structure:



Yorkshire Water is the only company in this group that is regulated by Ofwat. It holds the licence to provide water and sewerage services to our customers and the governance for Yorkshire Water is described within this report.

Details of the group's shareholders and capital structure, along with further information on the companies shown here are published on the group's website, found at:

Our Board of Directors

The primary focus for the Board is to lead the development and delivery of the company's purpose, strategy and values needed to meet the service and performance expectations of our customers and stakeholders.

An executive director is a member of the Board who also has management responsibilities within the company.

A non-executive director is a member of the Board who contributes their wider skills and experience to Board decision-making.

The non-executive directors do not engage in the day-to-day management of the organisation, but are involved in policy making, setting the

company's strategy, values and standards, making sure that the necessary financial and people resources are in place, and reviewing management performance. We are required to have a number of independent non-executive directors on our Board, which means that they are free of any links with us or our shareholders. Our investor non-executive directors represent our larger shareholders.





Vanda Murray OBE, Independent Non-Executive Chair

Appointed: Vanda joined the Board as Independent Non-Executive Director on 1 July 2021, stepping up to become the Chair of the Board on 1 September 2021.

Skills and experience: Vanda is a Fellow of the Chartered Institute of Marketing and has extensive experience of corporate leadership in both executive and non-executive roles. From 2001 to 2004 she was Chief Executive Officer of Blick plc, a FTSE quoted company, where she doubled the value of the business before it was acquired by The Stanley Works Inc. She was also Managing Director of Ultraframe plc between 2004 and 2006. Vanda was appointed OBE for Services to Industry and to Export in 2002.

Other roles: Vanda is Non-Executive Chair of Yorkshire-based Marshalls plc and is the Senior Independent Director and Chair of the Remuneration Committee at Bunzl plc. She is a Non-Executive Director at Manchester Airports Group, where she chairs the Remuneration and Corporate and Social Responsibility Committees. Vanda is also the Chair of Kelda Holdings Limited.

Committee Membership:



AR Audit and Risk Committee

N Nomination Committee

PR People and Remuneration Committee

SHE Safety, Health and Environment Committee

PV Public Value Committee

Chair of Committee



Scott Auty, Non-Executive Director

Appointed: Scott joined the Board as a Non-Executive Director in September 2017.

Skills and experience: Scott is a London based Partner in DWS's infrastructure investment business, Europe, and is responsible for the origination and execution of infrastructure investment opportunities as well as the ongoing management of the acquired assets. He is a member of the Investment Committee for the three European infrastructure funds managed by DWS. Prior to joining DWS's infrastructure business in 2005, Scott started his career at N M Rothschild & Sons' investment banking division where he was a specialist in the utilities and natural resources sectors.

Other roles: Scott is also a Non-Executive Director of Kelda Holdings Limited, a supervisory board member of Dutch waste management company Attero Holdings BV and a Non-Executive Director of the Spanish bioethanol producer Vertex Bioenergy SL.

Committee Membership:



Liz Barber, Chief Executive Officer

Appointed: Liz joined the Board as Group Director of Finance and Regulation in November 2010, stepping up to become the CEO in September 2019. Liz retired from the Board on 6 May 2022.

Skills and experience: Liz joined the company from Ernst & Young LLP where she held several Senior Partner roles, including leading the firm's national water team and the assurance practice across the North Region. Liz had been with Ernst & Young since 1987 and in that time worked with some of the largest companies in the UK. Liz specialised in delivery of services to the water industry, including several water companies and UK Regulators. Liz is a Fellow of the Institute of Chartered Accountants in England and Wales.

Other roles: Liz was the CEO for Kelda Holdings Limited until 6 May 2022. Liz is also a lay member and Deputy Pro-Chancellor of the University of Leeds, a Non-Executive Director of Cranswick plc and Chair of the Yorkshire and Humberside Climate Commission.

Committee Membership:





Andrew Dench, Non-Executive Director

Appointed: Andrew joined the Board as a Non-Executive Director in September 2017.

Skills and experience: Andrew is a Senior Vice President in GIC's Infrastructure team, based in London. He is responsible for the ongoing management of GIC's global infrastructure portfolio. Prior to joining GIC, Andrew was Deputy CEO/CFO of Veolia Water, UK, Ireland & Northern Europe, CFO of Electricity North West, and Head of Corporate Finance & Change at London Stock Exchange Group. While at Veolia, he was a Non-Executive Director of Affinity Water (formerly Veolia Water). Andrew started his career in the investment banking division of Morgan Stanley where he was focused on project finance, mergers & acquisitions, utilities, and the natural resources sector.

Other roles: Andrew is a Non-Executive Director of Kelda Holdings Limited and several other boards, including Teréga (Gas transportation and storage, France), Duquesne Light and Power (Electricity transportation and distribution, US), Greenko (Renewal generation, India) and Raffles Infra Holdings Limited (Infrastructure investment, Asia).

Committee Membership:



Russ Houlden, Non-Executive Director

Appointed: Russ joined the Board as a Non-Executive Director in January 2022.

Skills and experience: Russ is an Operating Partner at Corsair Infrastructure, a business unit of Corsair Capital. Russ brings a wealth of financial expertise and water industry experience to the Board, having been the CFO of United Utilities Group plc for ten years until July 2020. During his time at United Utilities, he was also Chair of the Financial Reporting Committee of the 100 Group from 2013 to 2020. Prior to his role at United Utilities, he was the CFO of Telecom New Zealand from 2008 to 2010 and Finance Director of Lovells from 2002 to 2008. Until 2002 he held a variety of divisional Finance Director positions in ICI and BT.

Other roles: Russ is a Non-Executive Director of Kelda Holdings Limited. He is also an Independent Non-Executive Director at Babcock International Group plc and an Independent Non-Executive Director and Chair of the Audit Committee at Orange Polska SA.

Committees:



Chris Johns, Chief Financial Officer

Appointed: Chris joined the Board as the CFO in June 2020.

Skills and experience: Chris joined Yorkshire Water from Northumbrian Water, where he had been the Finance Director since 2013. Prior to his role at Northumbrian Water, Chris was the Finance Director of Northern Gas Networks for eight years. Before that he held several senior financial management positions in the financial services sector, in both Yorkshire and London, including with Provident Financial plc and Morgan Stanley. Chris is a Member of the Institute of Chartered Accountants in England and Wales.

Other roles: Chris is the CFO for Kelda Holdings Limited and an Audit Committee member of Market Operator Services Limited.

Committee Membership:

None



Andrew Merrick, Independent Non-Executive Director

Appointed: Andrew joined the Board as an Independent Non-Executive Director in June 2019.

Skills and experience: Andrew brings considerable financial experience and expertise to the Board, as well as strong connections with the Yorkshire region. Prior to joining the Board, Andrew was the CFO of Irwin Mitchell solicitors, having previously worked as Group Finance Director for Dart Group plc and as Director of Finance for Bradford & Bingley plc. Andrew has also sat on the Board of 'Incommunities', a Bradford-based social housing provider, where he chaired the Audit Committee.

Other roles: Andrew is a Non-Executive Director of Market Harborough Building Society, a Trustee Director of The Nell Bank Charitable Trust and a Director of Ilkley Lawn Tennis & Squash Club Limited and its subsidiary, ILTSC Events Limited.

Committee Membership:



Ray O'Toole, Senior Independent Director

Appointed: Ray joined the Board as an independent Non-Executive Director in June 2014, becoming the Senior Independent Director in July 2017.

Skills and experience: Ray has spent the majority of his career in the transport sector, including as Group Chief Operating Officer and UK Chief Executive Officer for National Express plc for ten years until 2010. This included responsibility for a fleet of 20,000 buses and coaches, nine rail franchises and 40,000 staff, with operations in Spain, the USA, Canada, and the UK. He started his non-executive career whilst at National Express as a member of the Board of the British Transport Police Authority. From 2011 Ray served as a Non-Executive Director and member of the Safety Committee of the Office of Rail and Road until he was appointed as Chief Executive Officer of Essential Fleet Services Limited from July 2015 until February 2017. Ray has a background in mechanical engineering in addition to bringing his skills in safety and strategy.

Other roles: Ray is the Non-Executive Chair and Chair of the Health, Safety and Environment Committee of Stagecoach Group plc.

Committee Membership:



Dame Julia Unwin, Independent Non-Executive Director

Appointed: Julia joined the Board as an Independent Non-Executive Director in January 2017.

Skills and experience: Julia brings to the Board a wealth of experience from the voluntary, commercial, and public sectors as well as from regulatory environments. She was the Chief Executive Officer of the Joseph Rowntree Foundation for a decade until 2016. She has regulatory experience having served on the Boards of the Housing Corporation, the Charity Commission and she was Deputy Chair of the Food Standards Agency. Through her engagement with consumers, regulation and public policy, Julia brings a deep understanding of the interests of customers and individual communities to the Board as well as a specific knowledge of the demographics of the Yorkshire region and of poverty, vulnerability, and disadvantage. She has worked extensively on issues to do with developing social value. In May 2019 Julia received a Lifetime Achievement Award from the Chartered Management Institute and was appointed a Dame in the 2020 New Year Honours list for her contribution to civil society.

Other roles: Julia is a Non-Executive Director of Mears Group plc and is the Chair of the Board of Governors of York St John University. She is the Inaugural Chair of the Smart Data Foundry, Edinburgh University.

Committee Membership:





Andrew Wyllie CBE, Independent Non-Executive Director

Appointed: Andrew joined the Board as an Independent Non-Executive Director in September 2017.

Skills and experience: Andrew was Chief Executive Officer of Costain Group plc for 14 years up until May 2019. He was also a Non-Executive Director of Scottish Water from April 2009 to April 2017. Andrew has an MBA from the London Business School, he is a Chartered Engineer, a fellow of the Royal Academy of Engineering and was President of the Institution of Civil Engineers in 2019. Prior to joining Costain Group plc, Andrew worked for Taylor Woodrow where he was the Managing Director of the construction business and a member of the Group Executive Committee. Andrew was awarded a CBE for services to engineering and construction in the 2015 New Year Honours list.

Other roles: Andrew is a Non-Executive Director of Persimmon plc and BMT Group Ltd and undertakes a variety of independent advisory roles.

Committee Membership:



Post year end appointment

After the year end, we announced the retirement of our CEO, Liz Barber with effect from 6 May 2022, and the appointment of our new CEO, Nicola Shaw, from 9 May 2022. Nicola brings with her extensive experience in regulated infrastructure businesses and has an excellent track record in driving efficient delivery whilst also improving customer service and colleague engagement. Most recently Nicola was the UK Executive Director for National Grid and was previously the Chief Executive Officer of High Speed 1 and a Director of First Group. She is currently a Non-Executive Director of International Airlines Group.

Other directors during the year

The following directors also served on the Board for the periods shown during the year. More information on their skills and experience can be found in our 2021 ARFS:

Anthony Rabin –
Independent Non-Executive Chair
to 1 September 2021.

Nevil Muncaster –
Chief Strategy & Regulation Officer
to 31 July 2021.

Mike Osborne –
Non-Executive Director
to 27 October 2021.

Meeting the Board leadership and transparency objectives

The UK Corporate Governance Code

Yorkshire Water is a private limited company and does not have listed shares. Despite this, the Board chooses to report its compliance with the UK Corporate Governance Code on an annual basis as it wishes to comply with best practice and to be fully transparent in the way in which it operates.

The Board considers that it has complied with all the principles of the UK Corporate Governance Code throughout the year ended 31 March 2022, with the exception of the following provisions:

- **Provision 11** – this principle requires that at least half the Board, excluding the Chair, should be independent non-executive directors. We have not complied with this provision during the year due to the presence on our Board of three investor directors who represent our shareholders and are therefore not independent. We have found having investor directors on our Board extremely beneficial so that we can hear shareholder views first-hand and ensure that our shareholders have a full understanding of the opportunities and challenges facing the business. It also enables the business to operate as if it is a separate entity, as required by the Ofwat Board Leadership, Governance and Transparency Principles.
- **Provision 18** – this provision relates to the annual re-election of directors by shareholders at the AGM. As a private limited company, we do not hold an AGM and therefore this provision does not apply.
- **Provision 24** – this provision requires the Audit Committee to consist entirely of independent non-executive directors. Our Audit and Risk Committee has a majority of independent non-executive directors but also has an investor director, who we believe provides useful challenge and insight to the Committee.
- **Provision 32** – this provision requires the Remuneration Committee to consist entirely of independent non-executive directors. Our People and Remuneration Committee has a majority of independent non-executive directors but also has three investor directors, which means we receive insight from investors when making remuneration decisions, as well as ensuring our investors hear first-hand about the people-related matters considered by the Committee.

- **Provision 36** – this provision requires that our remuneration schemes promote long-term shareholdings by executive directors in order to align the interests of executive directors with long-term shareholder interests. As a private company our shares are not publicly traded, and shares are not offered as part of our remuneration schemes. Instead, our shareholders are represented on our People and Remuneration Committee and therefore have direct input to ensure that the structure of our remuneration schemes aligns the interests of executive directors with those of our shareholders.

The UK Corporate Governance Code is available on the website of the Financial Reporting Council at:

The Ofwat Board Leadership, Governance and Transparency Principles

It is a requirement of our Instrument of Appointment that we comply with the Ofwat Board Leadership, Governance and Transparency Principles, which were published in January 2019.

We have set out below each of the four key objectives from the principles and an explanation of what we are doing to ensure we comply with these:

The regulated company Board establishes the company's purpose, strategy, and values, and is satisfied that these and its culture reflect the needs of all those it serves.



Setting our purpose, vision, and behaviours

We launched our purpose, ambition and values back in March 2020, following a significant piece of work with our colleagues, customers, directors, shareholders and other stakeholders. The Board was heavily involved throughout this process and gave approval to the final version prior to its launch. Our purpose is 'we're proud to play water's role in making Yorkshire a brilliant place to be – now and always' our vision is 'to put people at the heart of everything we do'. We have four desired behaviours that seek to ensure that the right culture is achieved across the business:



We own it



We're better together



We're always learning



We have heart

During the year we have launched our Yorkshire Water Code of Ethics which provides further support to colleagues on how to ensure that they are always doing the right thing and where to go for help and advice if they are faced with an ethical decision as part of their work. This was reviewed and signed off by the Board prior to launch and has been accompanied by mandatory online learning for all colleagues to ensure that they have understood the Code of Ethics and how it applies to them.

The Board has also been closely involved in the setting of our strategic vision during the year, with individual Board members participating in discussions around the strategy and information being supplied to the Board at regular intervals on how the strategy was being developed, including information on external dynamics and long-term considerations. This culminated in a Board workshop in September 2021 at which the strategy was presented, discussed and approved. Our strategic vision focuses on service, resilience and growth alongside being a trusted company.

Embedding our purpose, ambition, and behaviours

In 2019 we set up the Colleague Engagement Forum as one of the ways in which the Board can hear first-hand from colleagues from across the business. At least one non-executive Board member attends each meeting and often more. Minutes from each meeting are circulated to the Board and there is a standing agenda item at each Board meeting to discuss the key messages being received from the Forum.

Forum members are free to raise any matters at the Forum and there are also scheduled agenda items to discuss key topics on which the Board would like to receive feedback. The Forum meets six times each year and also met the Board for an informal lunch during the year to talk one-on-one about anything that they wish to communicate to the Board. The Forum gives the Board great insight into the culture of the organisation and the extent to which the purpose, ambition and behaviours are embedded in the business and the strategy understood.

The Board also gains insight in the culture of the business through the Yorkshire Water Voice survey results, which are fed back in detail to the Board via the People and Remuneration Committee, including a summary of the comments received from colleagues through the survey.

The Board also seeks to find out how it feels as a key supplier working with Yorkshire Water and has invited two key suppliers during the year to attend the Health, Safety and Environment Committee to receive feedback first-hand on their experience of working with Yorkshire Water and how this might be improved. This also helps the Board to understand how the desired culture and behaviours are embedded in our interactions with key suppliers.

Our purpose, vision and behaviours has become firmly embedded across our organisation with colleagues often referring to our vision in their comments on our intranet and in their responses to the Yorkshire Water Voice survey. Our colleagues also recognise when other colleagues consistently exhibit our core values with hundreds of nominations received each year under our employee recognition programme.

The regulated company has an effective Board with full responsibility for all aspects of the regulated company's business for the long-term.

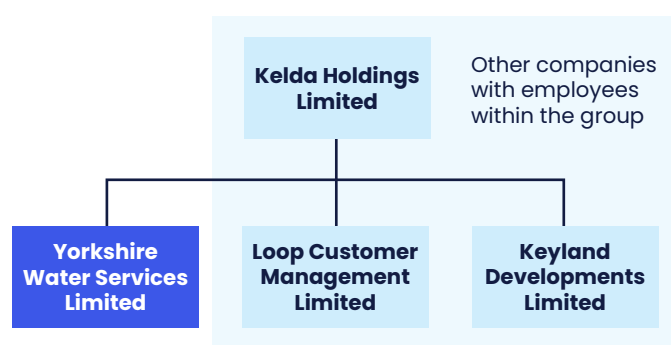


How our Board operates

Yorkshire Water is part of a group of companies and has an ultimate parent company, Kelda Holdings Limited which is owned by our shareholders.

The Board of Yorkshire Water recognise the importance of ensuring that Yorkshire Water operates as a separate company and that the Board is able to make decisions that are in the best interests of the company rather than being influenced by what might be best for the group. This is achieved in a number of ways:

- We have shareholder representatives on the Yorkshire Water Board, which means that three of our four shareholders are decision makers on our Board, which vastly reduces the need for decisions to be referred to the ultimate parent company. All of the Yorkshire Water directors have legal and fiduciary duties to promote the success of the company for both current and future members, which is something our investor directors are acutely aware of so decisions are always made from the perspective of Yorkshire Water rather than the wider group. In addition we have four independent non-executive directors on the Yorkshire Water Board who have no connection with the ultimate parent company and therefore can ensure that decisions are made solely in the best interests of Yorkshire Water.
 - From a practical perspective the Yorkshire Water Board has full responsibility for all aspects of the business. The matters reserved for the Board of Kelda Holdings Limited only require limited decisions to be referred to Kelda Holdings and in practice this is simply done for verification. Kelda Holdings Limited has never over-turned a decision made by the Board of Yorkshire Water and it is highly unlikely that this would ever happen given the presence of the investor directors on the Yorkshire Water Board.
 - The Kelda Holdings Board met only briefly on four occasions during the year. The meetings are typically only half an hour in length and rarely focus on Yorkshire Water-related matters as these have already been discussed at the Yorkshire Water Board.
- Most of the decisions made by the Kelda Holdings Board relate to matters specific to Kelda Holdings itself or other companies within the group, outside of Yorkshire Water. These are particularly those with employees, as shown in the simplified group structure to the below. During the year there were 10 decisions made by the Kelda Holdings Board, only three of which were directly related to Yorkshire Water. **These are highlighted in bold below:**



- Approval of the Code of Ethics and tax strategy for the group companies outside of Yorkshire Water Services Limited;
- **The reappointments of Andrew Merrick and Andrew Wyllie as independent non-executive directors of Yorkshire Water;**
- The appointment of Vanda Murray as Chair of Kelda Holdings Limited;
- Approval of the ARFS for Kelda Holdings Limited;
- Approval of the proposed approach to the transfer of LIBOR arrangements to SONIA on the group financial instruments outside of Yorkshire Water;
- **The reappointment of Deloitte as the external auditor for the group;**
- Approval of the Modern Slavery Act Statement to be published on the Kelda website;
- Approval of a series of steps to enable the dissolution of a non-regulated group company;
- Approval of the refinancing of bank facilities within a non-regulated group company; and
- Approval of the FY23 budget for the group companies outside of Yorkshire Water.

Why does the Board of Kelda Holdings make some decisions that impact on Yorkshire Water?

We refer some matters to the Board of Kelda Holdings for approval as we believe this reflects best practice in relation to certain decisions. These are things such as the appointment of independent non-executive directors, changes to executive remuneration and the appointment of our external auditor. These decisions are always recommended by the Board of Yorkshire Water first so nothing is referred to the Board of Kelda Holdings that is not already approved by Yorkshire Water, but verification is required from the Board of Kelda Holdings to provide a further layer of scrutiny from the five Directors who are on the Kelda Holdings Board but not on the Board of Yorkshire Water, which helps to ensure

that the Board of Yorkshire Water is not able to appoint unsuitable directors or an auditor which is not sufficiently independent from the business, for example. In a listed company this control comes from such decisions having to be put to shareholders in an Annual General Meeting. As a privately owned company, Yorkshire Water refers these decisions to its shareholders via the Kelda Holdings Board.

Decisions in relation to dividends

As a privately owned company providing a public service it is essential that we have clear and transparent controls in place in relation to any dividends that we pay. All dividends paid by Yorkshire Water Services Limited are solely decided by the Board of Yorkshire Water. The Board of Kelda Holdings Limited is only able to approve dividends being paid by Kelda Holdings Limited and makes no decisions in relation to dividends being paid by Yorkshire Water Services Limited. The dividend policy for Yorkshire Water Services Limited is set every five years as part of our Price Review and approved by Ofwat.

Dividend policy

The company's dividend policy is to:

- Determine a base dividend from a set yield applied to regulatory equity derived by reference to the company's actual capital structure. This base dividend is assumed to grow annually in real terms and with CPIH during AMP7, which recognises the management of economic risks and capital employed;
- Adjust the base dividend to reflect and recognise in-the-round company performance and benefit sharing from service and efficiency performance particularly performance against relevant targets set in the determination of price limits; the continuing need for investment of profits in the business and the funding of employee interests;
- Consistently calculate dividends in accordance with the policy for any dividend payments made in AMP7 and to ensure they are justified in relation to the factors outlined above; and

The Board's leadership and approach to transparency and governance engenders trust in the regulated company and ensures accountability for their actions.



- Ensure there are sufficient profits available for distribution in the foreseeable future and the company remains financially resilient, following the payment of a dividend, when considering the undertakings and financial covenants that are part of Yorkshire Water's financing arrangements.

When approving dividends to be paid in a financial year, the Board assesses both company performance to date and that expected for the whole of an AMP to determine the total dividends that could be paid for the whole AMP. As such dividend payments are considered within the longer-term context of the business and not just on the basis on the last 12 months and explicitly considers the ability of the business to be able to deliver into the future given the proposed dividend.

For the 2021/2022 financial year the Board considered a number of factors prior to approval of dividends including: delivery of Performance Commitments that incorporate incentive based rewards and penalties for AMP7, circumstances where performance has not met targets, the on-going EA and Ofwat investigations into environmental performance where the company remains actively engaged with these regulators to resolve any remaining issues, and the ability to maintain financial resilience through the remainder of AMP7 in line with the review of long-term viability.

Dividends of £52.6m were paid in the year (2021: £45.2m): none of which were available to the shareholders of Kelda Holdings Limited (2021: nil), Yorkshire Water's ultimate parent company, as they have continued to support the company's financial resilience since AMP6.

These dividends included distributions of £29.4m (2021: £35.1m) that did not impact the company's liquidity position or its distributable reserves as they were returned immediately to the company in the form of interest receipts on intercompany loans.

No dividends have been proposed post year-end in relation to 2022 (2021: £nil).

Handling conflicts of interest

Each of our directors is subject to the obligations in relation to conflicts of interest that are set out in company law. Our Board members are all experienced directors and receive regular reminders of their statutory obligations.

Our Board has investor directors, as well as executive and independent non-executive directors, and we place great importance on ensuring we maintain the right balance in the boardroom, so that the effectiveness of the Board is not undermined by conflicted interests. We have a standing agenda item at each meeting for conflicts of interest. If any of our directors believed that they were conflicted in any way, then this would be declared and appropriate action taken, such as excluding them from decisions where they may be conflicted. No conflict situations have arisen during the year under review but we have taken steps during the year to ensure a potential future conflict situation has been appropriately handled. This is explained further [in our Leadership section](#).

Ensuring long-term focus

Our long-term strategy looks 25 years ahead and takes into consideration the long-term forecasts for Yorkshire in many areas such as population growth, water consumption and climate change. The five-year Business Plan is aligned to this longer-term strategy when it is drawn up and reviewed by the Board. Each year the Board receives 'horizon scanning' information which sets out external matters to be aware of over the longer-term. The Board also considers the long-term viability of the business and makes a statement on this, considering various scenarios across the current and next AMP. Further information on this can be found in the Strategic Report of our ARFS.

Our approach to transparency and governance

Our corporate strategy which was approved by the Board during the year, sets out our goals around growth, resilience and service. The whole strategy is underlined by our desire to be a trusted company.

We recognise our position as a regional monopoly and we know that this makes it essential that our customers are able to trust us, as our household customers do not have the option to move to another supplier if we do not meet their expectations. We seek to be transparent and ethical in all that we do. We have taken a number of steps to improve our transparency over recent years, including the launch of our Code of Ethics as mentioned earlier in this section.

Boards and its committees are competent, well run, and have sufficient independent membership, ensuring they can make high quality decisions that address diverse customer and stakeholder needs.



The Code sets out our expectations of everyone representing Yorkshire Water, at any level and provides a framework to help when someone faces a difficult ethical decision. The Code was developed with the help of some of our Board members and was reviewed and approved by the whole Board prior to launch.

Our Public Value Committee focuses on the social purpose and public accountability of the business, our role as an anchor institution in Yorkshire and the key role we play in the health, wellbeing, and prosperity of the region. Part of the focus of the Committee this year has been to look at how we report on our public value both internally and externally and how we assure the information we are reporting.

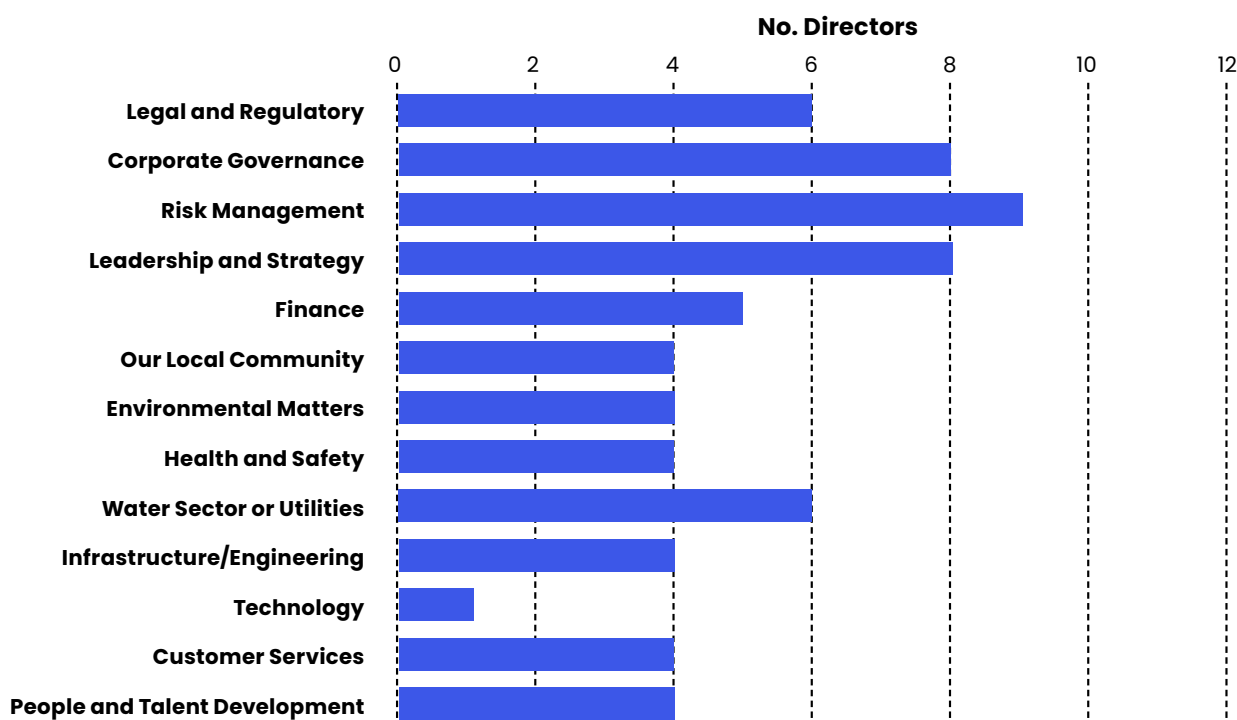
We take governance very seriously and seek to comply with the various regulatory and statutory requirements, adhering to best practice wherever possible. The disclosures in this Directors' Report set out our approach to governance and our compliance with such requirements.

Variable pay

The measures used in calculating variable pay for executive and senior colleagues are set out in the Directors Remuneration Report. Over 75% of the measures are customer, community or environment-related to ensure that our executive director and senior colleague goals are aligned with those of our key stakeholders. There is, therefore, a clear correlation between delivering for customers, community and the environment and any variable payments made, which are transparently set out in our Directors' Remuneration Report each year.

Assurance of information

We seek to assure information through independent means wherever we can, and we detail in this report where information has been independently verified and the three-line assurance process that we have in place to ensure the information we provide is trustworthy.



Ensuring an effective Board

We undertake an annual Board evaluation to consider the effectiveness of our Board. In 2022 this has been an externally facilitated evaluation, undertaken by Lintstock, who are entirely independent from Yorkshire Water. The results of this and our goals for the coming year are described in our Strategic Report.

Further information on how the Board fulfils its duties in relation to stakeholders, including colleagues, customers and communities, can be found in our Section 172(1) report.

In all that the Board does we seek to apply one of the 'five S's' of corporate governance. These are strategy, stewardship, support, stretch and scrutiny and reflect the five modes in which the Board operates at different times. This has been helpful in ensuring that the Board does not always operate in one mode but performs a different function depending on the nature of what is being considered, which in turn helps to enhance the effectiveness of the Board. We arrange training for Board members where necessary to enhance knowledge in specific areas and arrange site visits where appropriate to enable Board and Committee members to see operations first-hand to enhance understanding, such as the Safety, Health and Environment Committee visit to Scammonden Reservoir in November 2021.

We maintain a Board skills matrix which looks at the skills and experience of each of our Board members, and is used to identify any potential gaps in the expertise and experience that we have on the Board. This helps us to ensure we maintain a balance of the skills and experience that we need now and may need in the future. The matrix is reviewed by the Nomination Committee and used when we undertake recruitment to ensure the role profile for any vacancy reflects the needs highlighted by the matrix. The chart above shows a summary of our Board skills matrix.

The matrix shows that the current Board is least skilled in technology and digital matters. In response to this our Audit and Risk Committee has had regular updates in the year on cyber risk, and a workshop is planned later in 2022 to consider technology and the impact of digital developments on our industry.

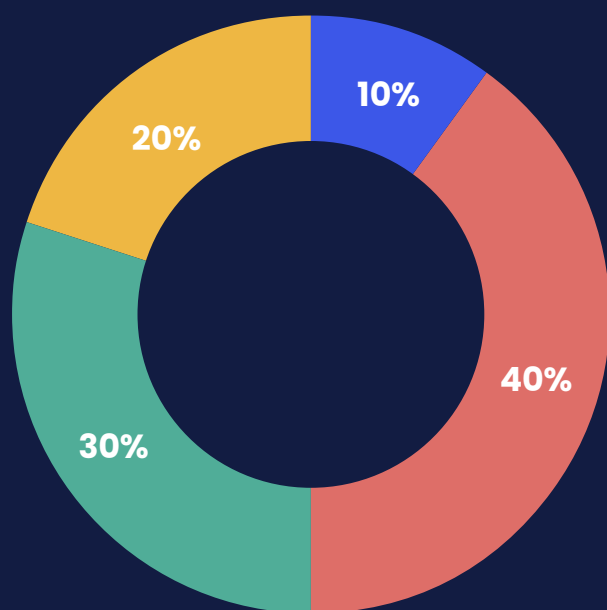
We are aware that our current Board does not reflect the diversity of the community that we serve from both a gender and ethnicity perspective. We aim to comply with the recommendations of the latest update from the Parker Review in March 2022 and the FTSE Women Leaders Review, published in February 2022, as soon as we are able. We always take these recommendations into account when recruiting to the Board, and a Board Appointments Policy is in place which ensures a consistent and fair approach to recruitment is always undertaken. The fundamental objective of recruitment remains to ensure that the best candidate for the role is appointed, but we actively work with recruitment consultants to ensure we review a diverse range of candidates to ensure all are given an equal opportunity for the role.

We have provided a report from each of our Board committees as part of this ARFS, which sets out the work that each Committee has done during the year, the purpose of the Committee and the areas for which each Committee can be held accountable. We have gone beyond the governance requirements of having an Audit, Remuneration and Nomination Committee to also have Public Value and Safety, Health and Environment Committees to enable Board members to spend additional time in these areas, focusing on specific matters in detail and providing assurance in these areas to the Board. We continue to keep the Terms of Reference of each Committee under review to seek to optimise its effectiveness.

The Wates Corporate Governance Principles for Large Private Companies

The Wates Corporate Governance Principles principles were published in December 2018 and are a voluntary code for private companies. These contain six principles relating to purpose and leadership, Board composition, director responsibilities, opportunity and risk, remuneration and stakeholder relationships and engagement. The Board has reviewed these principles and considers that it complies with all six. Further information on how the Board operates in each of the six areas identified is contained throughout this Board leadership, transparency and governance section and in the Strategic Report and Directors' Report of our ARFS.

Leadership



Our Board composition

As at 31 March 2022, the Board comprised the following:

- Independent Non-Executive Chair
- Independent non-executive directors
- Investor non-executive directors
- Executive directors

Board committees

The Board has established and delegated specific responsibilities to Audit and Risk, Nomination, People and Remuneration, Safety, Health and Environment, and Public Value Committees. Each committee reports back to the Board after each meeting to ensure that the whole Board is aware of the matters considered by the committees.

Each committee has its own report which sets out the role of the committee and how it has operated during the year under review.

How the Board operates

The Board had six scheduled meetings in the year, with two additional ad-hoc meetings held to review and approve the detailed Business Plan for the year and the business case for our ongoing Transformation programme. Attendance at the meetings is shown in the table on [page 337](#). During the year Board members met face-to-face whenever possible in accordance with the COVID-19 restrictions in place at the time. When necessary Board, committee and workshop meetings have been held remotely by video conference. Usually our scheduled meetings are preceded the evening before by an informal meeting over dinner, allowing more time to debate issues in depth, again this has been held where possible during the year.

In addition, the Board met for workshops during the year to consider specific matters in greater depth. In the year under review five of these workshops were held to consider such topics as strategy development, cyber security, transformation, financial resilience and our people-related programmes.

The Board agenda is set for each meeting by the Chair, with input from the executive directors and the Company Secretary. In addition, any of the independent non-executive directors or investor directors can request a matter to be added to the agenda at any time. Monthly reports on operational performance, customer experience, financial performance, people matters, governance, compliance and health and safety are circulated to the Board members regardless of whether or not a Board meeting is scheduled.

The Board seeks to regularly meet both formally and informally with senior management from across the business to gain further insight into the day-to-day operations and the key risks and opportunities facing each part of the business. Members of the YWLT and other key senior managers are regularly invited to attend Board meetings to provide updates and give the non-executive Board members regular direct access to the senior management team.

There is a schedule of Matters Reserved for the Board which sets out the specific matters that must be referred to the Board for approval. These include matters relating to company structure, dividend policy, material regulatory submissions and external press releases, along with significant operational and strategic matters.

The Board considers the role of the Company Secretary to be key in ensuring that the Board has the right governance in place and that Board processes follow best practice. The Company Secretary meets with each of the directors individually as necessary to discuss governance-related matters. The directors are also able to obtain independent professional advice at the expense of the company whenever necessary.

Attendance at Board and committee meetings

Director	Board No./max	Audit and Risk Committee No./max	Safety, Health and Environment Committee No./max	Nomination Committee No./Max	People and Remuneration Committee No./Max	Public Value Committee No./Max
Vanda Murray ¹	5/5	-	3/3	2/2	3/3	4/4
Anthony Rabin	4/4	-	-	2/3	2/2	1/1
Scott Auty	8/8	-	3/3	3/4	5/5	-
Liz Barber	8/8	-	3/3	3/4	-	4/4
Andrew Dench	8/8	6/7	-	3/4	5/5	-
Russ Houlden ¹	1/2	-	-	1/1	1/1	0/1
Chris Johns	8/8	-	-	-	-	-
Andrew Merrick	8/8	7/7	3/3	4/4	-	4/4
Nevil Muncaster	4/4	-	-	-	-	1/1
Ray O'Toole	8/8	7/7	3/3	4/4	5/5	-
Mike Osborne	5/5	4/4	1/1	3/3	-	2/2
Julia Unwin	8/8	-	2/3	3/4	4/5	4/4
Andrew Wyllie	8/8	7/7	3/3	4/4	4/5	-

¹Russ Houlden missed the meetings held just days after his appointment due to a prior commitment.

Training and development

The Board receives regular updates on governance-related matters and more formal training where appropriate. Potential training needs are discussed as part of individual performance evaluations, plus each director is given the opportunity to flag any additional training requirements as part of the annual Board evaluation process. New directors joining the company are given a broad and comprehensive induction to the business consisting of site visits, meetings with key personnel and detailed information relating to the business, as well as any training specifically required in relation to the duties of directors and their role on the Board.

Business model and KPIs

The details of our business model and our KPIs are included in the Strategic Report.

Reappointment of the external auditor

Deloitte LLP has advised of their willingness to continue in office and have confirmed their continued independence. Deloitte LLP was appointed as external auditor in 2018, following a robust competitive tender process which resulted in a change of auditor. Following consideration of the relationship with the external auditor, the Audit and Risk Committee has recommended to the Board that Deloitte LLP is re-appointed, and it has been resolved to re-appoint them. They have provided an independent audit opinion on these accounts which can be found in the *Financial Statements* section. In line with best practice, our current Audit Partner, Jane Boardman, will step down from the audit following the publication of this document and will be replaced by another Audit Partner who is entirely independent from Yorkshire Water.

Board evaluation

We reported last year on the Board evaluation that we undertook in 2021 and the areas for additional focus that were identified through that evaluation. The table below sets out these areas and the progress made during the year:

Area for additional focus	Progress in 2022
Ensuring a greater focus on operational matters, including site visits where possible and greater interaction with a broader cross-section of colleagues, to make up for some of the missed interactions in the year under review.	Due to the ongoing impact of COVID-19 throughout much of the year under review, the Board has been unable to undertake as many site visits as it would have liked. The SHE Committee paid a visit to Scammonden Reservoir towards the end of 2021 and further site visits are now built into the forward plan for 2022/2023.
Making greater use outside of the Boardroom of the experience of the independent non-executive directors and investor directors, in helping with mentoring and colleague development for high-potential individuals.	Many of the Board members have attended meetings held as part of our Transformation programme to hear first-hand about the progress of the programme and to contribute their experience and expertise where relevant. We also continue to build a development programme for high-potential individuals in the organisation and will seek to include the experience of our Board members as part of that programme where practical.
Continuing to improve the quality of Board papers and presentations in Board and committee meetings, to focus these even further on the matters that require consideration and input from the Board.	We continue to improve the quality of our Board and committee papers and presentations and feedback from our evaluation in 2022 shows that these have improved over the year. There is always more that can be done in this area so we will continue to strive to make papers as useful as possible to enable the Board to focus on the things that matter.

In 2022 our Board evaluation has been undertaken by Lintstock as an independent, external facilitator. The evaluation consisted of detailed online questionnaires which were completed by all Board members. The results from these questionnaires were compiled into a report which was shared with the Board for discussion.

The review concluded that the Board and its committees were operating effectively with a number of areas of strength noted, including oversight of stakeholders, Board dynamics and the way in which Board meetings are managed.

The review highlighted some specific areas for focus in 2022:

- Ensuring greater focus on colleague engagement with the Board wishing to receive more regular updates on colleague sentiment;
- More time to be spent by the Board in considering technology and digital developments, reflecting the relatively low level of expertise in this area at the Board;
- Ensuring greater focus by the Board on customers and a desire to pursue more innovative ways of allowing the Board to learn from, and interact with, customers; and
- Some specific topics were highlighted for inclusion in the forward agenda for the Board, including a deep dive on specific environmental matters, climate change, culture, PR24 and regulatory engagement.

An action plan has been developed and agreed by the Board and the progress made will be reported in our Corporate Governance Statement for the year ended 31 March 2023. In addition to the annual Board evaluation, the Chair meets with each Board member individually on at least an annual basis to discuss their own performance and to identify any areas for development or potential training needs. The Senior Independent Director also gathers feedback separately on the performance of the Chair and discusses this with her at least annually.

Non-executive director meetings

The independent non-executive directors and investor directors meet with the Chair at regular intervals to discuss Board-related matters.

Powers of the directors

The business of the company is managed by the directors, who may exercise all of the powers of the company, subject to the provisions of the Articles of Association and relevant statutes.

All directors have a statutory duty to avoid conflicts of interest. Our Articles of Association permit those directors who are not conflicted to authorise conflict situations, as is standard practice. Conflicts of interest are a standing agenda item at each Board meeting and any potential conflicts must be disclosed and may then, if appropriate, be authorised by the non-conflicted directors. Any such authorisations may be subject to appropriate conditions. The directors do not consider that any actual conflicts of interest have arisen during the year between the roles of the directors as directors of the company and any other roles which they may hold.

Our Chair, executive directors and investor directors remain mindful that they hold directorships on both the Board and that of Kelda Holdings Limited and that these operate as distinct legal entities.

Going concern

The directors have a reasonable expectation that the company has adequate resources to continue in operational existence over a period of at least 12 months from the date of approval of the Financial Statements. For this reason, they continue to consider it appropriate to adopt the going concern basis of accounting in preparing the Financial Statements. Please see note 1 of the *Financial Statements* for full going concern considerations.

Directors' statement

The directors confirm that they consider the Annual Report & Financial Statements (ARFS),

taken as a whole, to be fair, balanced, and understandable and provides the information necessary for shareholders and other stakeholders to assess the company's performance, business model and strategy. When arriving at this position the Board was assisted by a number of processes including the following:

- The ARFS is drafted by senior management with overall co-ordination by senior members of the finance team to ensure consistency across the relevant sections;
- An internal verification process is undertaken to ensure factual accuracy;
- Comprehensive reviews of drafts of the ARFS are undertaken by the executive directors and senior management;
- An advanced draft is reviewed by the Board;
- The final draft is reviewed by the Audit and Risk Committee prior to consideration by the Board. The Committee advised the Board that the ARFS, taken as a whole, is fair, balanced, and understandable for shareholders and other stakeholders to assess the company's performance, business model and strategy. Each director in office at the date of this report confirms that, to the best of their knowledge the Financial Statements give a true and fair view of the assets, liabilities, financial position, and loss of the company; and
- The Strategic Report includes a fair review of the development and performance of the business and the position of the company, together with a description of the principal risks and uncertainties that it faces.

The directors have voluntarily complied with the Disclosure and Transparency Rules (DTR), to the extent that these can be reasonably applied to the company. The company is required, under its licence, to publish information about its results as if it were a company with a premium listing on the London Stock Exchange.

Disclosure of information to auditors

Each director in office at the date of this report confirms that:

- So far as the director is aware, there is no relevant audit information of which the company's auditor is unaware; and
- Each director has taken all the steps they ought to have taken as a director in order to make themselves aware of any relevant audit information, and to establish that the company's auditor is aware of that information.

Statement of directors' responsibilities

The directors are responsible for preparing the ARFS in accordance with applicable law and regulations. Company law requires the directors to prepare Financial Statements for each financial year. Under that law the directors have prepared the Financial Statements in accordance with United Kingdom Generally Accepted Accounting Practice (GAAP) (United Kingdom Accounting Standards, comprising Financial Reporting Standard 102: the Financial Reporting Standard Applicable in the UK and Republic of Ireland (FRS 102), and applicable law). Under company law the directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period. In preparing these Financial Statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently.
- State whether applicable UK Accounting Standards, comprising FRS 102, have been followed, subject to any material departures disclosed and explained in the Financial Statements.
- Make judgements and accounting estimates that are reasonable and prudent.
- Prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the Financial Statements comply with the Companies Act 2006. The directors are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. The directors are responsible for the maintenance and integrity of the ultimate parent company's website. Legislation in the United Kingdom governing the preparation and dissemination of Financial Statements may differ from legislation in other jurisdictions.

Relations with shareholders

As a private limited company, we have three shareholder representatives appointed as non-executive directors to our Board. Our fourth shareholder also has an appointed representative who attends our Board meetings as an observer. This means that we have regular interaction with representatives from each of our shareholders and are able to present detailed information to them to enhance their understanding of our business and the communities which we serve. This also means that we are able to understand in detail the views of our shareholders which has been extremely useful in building a strong relationship and understanding since the appointment of our first investor directors in September 2017.

Amendments to the company's Articles of Association

Any amendments to the company's Articles of Association may be made by passing a special resolution of the shareholders.

Our risk management framework

Our risk management framework, which sets out our approach to identifying and managing our risks, is detailed in our *Strategic Report* of our ARFS.

Risk management responsibilities

The Board

The Board has overall responsibility for setting the risk appetite for the business and for ensuring that the overall risk profile is aligned with this. It is also responsible for ensuring that the business maintains sound internal control and risk management systems, as well as reviewing the effectiveness of those systems.

In order to do this, the Board has regular meetings with senior management and, via the Audit and Risk Committee, receives regular reports from the internal auditors and the external auditor on the effectiveness of the systems of internal control and risk management. The Board is satisfied that the systems are embedded within the day-to-day activities of the business and cover all material controls, including financial, operational and compliance controls, and that the business continues to be compliant with the provisions of the UK Corporate Governance Code relating to internal control.

The leadership team

The YWLT is responsible for reviewing the risks that have been recorded, to ensure completeness and accuracy, as well as assessing the suitability of the mitigations in place and any proposed timescales for further controls to be implemented.

Audit and Risk Committee

The responsibilities of the Audit and Risk Committee in relation to risk management are set out in the Audit and Risk Committee Report.

Financial risk management

We produce an annual budget which is reviewed by senior management and ultimately approved by the Board. A business plan, based on the most recent Final Determination, is also in place which enables the business to have a clear longer-term view of financial projections on a five-yearly cycle.

We also prepare monthly performance reports against budget, which are monitored by each business area and reported at YWLT and Board meetings. Further information about the financial risk management policies in place and, in particular, the way in which credit risk, liquidity risk, interest rate risk and foreign currency risk are managed, is in note 18 to the Financial Statements.

Greenhouse gas emissions

Information on our GHG emissions for the year to 31 March 2022 is contained in our Strategic Report of our ARFS in the *Love our environment* section.

Nomination Committee Report

On behalf of the Nomination Committee and the Board, I am pleased to present the Nomination Committee Report for the year ended 31 March 2022.

The role of the Nomination Committee is to continually review the structure, size and composition of the Board and ensure that the balance of skills, knowledge and experience of the Board meets the requirements of the business, both now and in the future.

The Committee is also responsible for over-seeing the recruitment process for new directors and making recommendations for appointments to the Board.

Board Changes

As announced last year, I was appointed to the Board on 1 July 2021 and then became the Chair of the Board and the Nomination Committee from 1 September 2021. The Nomination Committee was heavily involved in the recruitment process for the new Chair. This was led by Ray O'Toole as the Senior Independent Director, who chaired the Committee meetings when the Chair succession was being discussed.

Russell Reynolds were engaged as independent recruitment consultants and they worked with the Committee to draw up the role profile and skills requirements. They then submitted a long list of Chair potential candidates, which was reviewed at length by the Committee, not least to ensure appropriate diversity amongst the potential candidates. A panel of Nomination Committee members then oversaw the interview process.

In March of this year, Liz Barber indicated that she was considering retiring from the business and the Committee then met to discuss the process for the recruitment of a new Chief Executive Officer, should the need arise.

Spencer Stuart was engaged to draw up a long list of candidates which was then reviewed by the Committee, with Committee members all meeting with the preferred candidate as part of the interview process. The Committee then unanimously approved the recommendation of Nicola Shaw to the Board as our new Chief Executive Officer.

Board structure

Our Board structure is different from that of a listed company in that we have three investor non-executive directors who sit on our Board, alongside our independent non-executive directors and our executive directors. This has been the case since September 2017. Having representatives from our shareholders in the room is immensely beneficial to us as it enables us to understand their views in detail and ensures they hear first-hand all of the information that is presented to the Board in order to provide support and challenge as appropriate.

Whilst they are not deemed independent in accordance with the definition in the UK Corporate Governance Code, the investor directors still carry the same legal and fiduciary duties as our other directors and fully understand the importance of the services that we provide to Yorkshire and the impact that our actions have on the local communities which we serve. They also individually bring skills and experience to the Board which assist in creating a greater diversity of skills and experience, which is beneficial to the Board in its decision making.

We maintain a Board skills matrix which the Nomination Committee uses to monitor the balance of skills and experience on the Board and to identify any areas where new skills or experience may be required. Further information on this can be found in the *Governance* section of the ARFS.

Developing talent

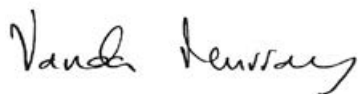
In addition to reviewing the composition of the Board, the Nomination Committee plays a key role in developing talent in the organisation, to identify and promote those who are potential future Board members, either of Yorkshire Water or elsewhere. This includes ensuring that there are equal opportunities for development for both men and women.

The Committee has a Board Appointments Policy which sets out the key principle for appointments to be made on merit, with consideration always being given to the need for diversity of all types. Yorkshire Water is committed to using open advertising or the services of an independent external adviser when recruiting to the Board and will only use external executive search firms who have signed up to the voluntary Code of Conduct addressing gender diversity and best practice.

Thanks and feedback

Our non-executive directors contribute significant time and effort in their roles and I would like to thank them for their commitment to Yorkshire Water.

Any feedback on the performance of the Nomination Committee is always welcome and this can be directed to me through our Company Secretary, Kathy Smith, who can be contacted at compsec@yorkshirewater.co.uk



Vanda Murray

Chair, Nomination Committee

15 July 2022

Statement on dividend policy for the appointed business

Our dividend policy explicitly states that distributions will only be made after an appropriate financial resilience analysis has been undertaken, that dividends will be adjusted to reflect and recognise company performance and benefit sharing from service and efficiency performance, and states the continuing need for the investment of profits in the business and the funding of employee interests.

The policy ensures that delivery for customers and colleagues is not just considered but factored into any amounts that are to be paid out as dividends. Whenever a dividend is considered by the Board, a paper is prepared by the finance team which sets out the purpose of the dividend and how it complies with the dividend policy. During the year, the Board of Yorkshire Water has approved the payment of £52.6m in dividends. A breakdown of this amount has been included in **Section 7**. There were no dividends paid in the year for distribution to the ultimate shareholders.

Statement on executive pay and performance

Directors' Remuneration Report

Our information on directors' remuneration is structured as follows:

- Annual Statement from the Chair of the People and Remuneration Committee, providing an overview of the key developments and remuneration decisions made during the financial year.
- Remuneration Policy Report, setting out the Remuneration Policy for 2023 that has been recommended by the People and Remuneration Committee and approved by our shareholders.
- Annual Report on Remuneration, showing how the Remuneration Policy for 2022 has been applied, how we intend to apply the new policy for 2023, along with a summary of the work of the People and Remuneration Committee in the year.

Yorkshire Water is a private limited company and our shareholders do not require us to hold an AGM. The ARFS is therefore not subject to approval at an AGM but is presented for information to our stakeholders, to ensure we are transparent in what we pay our directors, and in compliance with the relevant legislation.

Annual Statement from the Chair of the People and Remuneration Committee

On behalf of the People and Remuneration Committee, I am pleased to present the Directors' Remuneration Report for the year ended 31 March 2022.

Our aim is for complete transparency in relation to remuneration and we seek to make our remuneration policy easy to understand and one which enables us to recruit and retain high-performing executive directors, rewarding them fairly and reflecting the priorities and values of the business. We consider a lot of factors when we make decisions in relation to remuneration, including the pay and employment conditions of others across the rest of the business and in the communities we serve.

Our remuneration policy for executive directors is weighted towards variable pay so that we can align pay to both financial and non-financial performance. The performance measures for variable pay relate to customer experience, stability and reliability of service, health and safety, colleague engagement and delivery of our strategic transformation programmes, as well as financial performance, to ensure that remuneration links directly to our strategic objectives and the matters that are important to our people, our customers and our shareholders.

Policy changes

We review our remuneration policy each year to ensure it remains fit for purpose and achieves our aims of rewarding strong performance and not rewarding poor performance. Whilst the Committee believes the policy broadly remains fit for purpose it was agreed in the year that the policy for base salary should move from paying 'at or below the market median' to simply being described as paying 'the appropriate market rate for the role'. This is to enable the business to attract the best candidates for the role when vacancies arise.

Board changes

We have had a number of Board changes during the year which are set out below:

- Nevil Muncaster, our Chief Strategy and Regulation Officer, left the Board on 31 July 2021 to take up a role elsewhere in the water industry;
- Our previous Chair, Anthony Rabin, retired from the Board on 1 September 2021 and we appointed Vanda Murray as our Chair Designate on 1 July 2021. Vanda then took on the role of Chair of the Board upon Anthony's retirement;
- On 27 October 2021 one of our investor directors, Mike Osborne, left the Board. He was then replaced on 19 January 2022 by Russ Houlden; and
- After the year end, on 7 April 2022 we announced that our CEO, Liz Barber, had informed the Board of her wish to retire from the business and we also announced the appointment of Nicola Shaw in her place with effect from 9 May 2022.

The remuneration paid to each of our joiners and leavers is set out in this report and is consistent with our remuneration policy in each year.

Performance

This has been another challenging year for colleagues with the ongoing impact of the pandemic plus three severe weather events during the year. Our colleagues have shown great resilience in dealing with the pressures they have been under but we acknowledge that there are some areas in which we have not always met the standards that we have set ourselves, such as in the areas of internal sewer flooding, customer minutes lost, and unplanned outages. We are also acutely aware of the expectations of our customers and stakeholders in relation to our environmental performance and there has been much focus on this in the year internally, which will continue into future years.

We know that we have to make changes in the business to better control our cost base and our transformation programme seeks to improve efficiency and customer service. Further information on this and the performance of the business can be found in our *Strategic Report*.

All of these factors have been taken into account by the People and Remuneration Committee in our consideration of remuneration throughout the year and our desire to ensure that remuneration drives the right behaviours to align with the objectives of the business.

Key decisions by the Committee in the year

The Committee met five times during the financial year and there have been a number of key decisions taken, which are outlined below:

The remuneration paid to the Chair of the Board

As noted above, Anthony Rabin retired from the Board on 1 September 2021. The Committee reviewed his remuneration arrangements prior to his departure and recommended to the Board that he should receive his basic salary until 30 November 2021, in line with his contractual entitlement.

As noted in our remuneration report last year, Vanda Murray joined the business as our Chair Designate on 1 July 2021, stepping up to become the Chair of the Board upon the retirement of Anthony Rabin. The Committee reviewed the remuneration to be offered to Vanda, considering the significance of her role and her previous experience, and recommended to the Board that a package be offered in line with our remuneration policy; with a base salary of £275,000. This was paid to Vanda from the date of her appointment in July to reflect the considerable time required over the initial months to undertake an in-depth induction to the business and a smooth transition from one Chair to another. Further information on the remuneration received by Vanda in the year is detailed later in this report.

Remuneration paid to Nevil Muncaster upon his departure

Nevil Muncaster resigned from the Board on 31 July 2021 and left to take up a role elsewhere in the water sector. The Committee reviewed the remuneration arrangements for his departure and agreed that as voluntary resignations did not qualify for treatment as a good leaver, Nevil would forfeit any future payments from the executive incentive plan (EIP) and long-term incentive plan (LTIP) schemes following his departure. He received his base salary and associated benefits up until the date of his departure on 31 July 2021. Further information on the amounts paid to Nevil during the year are detailed later in this report.

Salary review for executive directors

In our report last year, we noted that the Committee had provisionally agreed a pay increase for the executive directors of up to 1.75% but that this remained subject to the outcome of the pay negotiations across the rest of the business at the time of signing of the report. The pay negotiations were concluded in October 2021 at 3.0% for those in Bands 3 to 6. It was agreed by the Committee at that point that an increase of 1.0% would be applied to the executive directors, backdated to 1 April 2021. Liz Barber chose to waive her increase for the second year in a row and therefore this increase was only applied to Chris Johns.

The Committee then reviewed the pay of the executive directors in March 2022, taking into consideration additional factors including the average pay increase across the rest of the organisation of 3.0% from 1 April 2022, prevailing market rates and external economic factors such as the significant increase in inflation. Following detailed discussions, it was decided to apply a pay increase of 3.0% to the base pay of the executive directors with effect from 1 April 2022 to align with the rest of the workforce and to reflect movements in market rates and the increased cost of living. This was not applied to the base pay for Liz Barber given her forthcoming retirement from the business.

The award and measures for the EIP

Awards are made annually under the EIP in April of each year. As in previous years, the awards made in April 2021 to each of the executive directors were equivalent to a maximum of 150% of base salary for the short-term element of the scheme and up to 150% of base salary for the long-term deferred element, in line with our remuneration policy.

The Committee also agreed on the measures for the short-term element of the award, setting the threshold, target and maximum performance levels for each element of the scheme to drive delivery of the desired outcomes for the business.

The long-term performance measures for the EIP that was awarded in 2020 were also agreed and communicated to participants. These aim to ensure that the position achieved at the point of vesting in 2021 is at least maintained for the remaining performance periods.

Variable pay vesting in 2022

There were two variable pay schemes with performance periods ending in 2022; the first year of the EIP awarded in 2021 and the final vesting of the previous LTIP scheme which was awarded in 2019.

The performance in the first year of the 2021 EIP award indicated vesting of 43.0%. This was discussed at length by the Committee, considering the discretionary elements of the scheme and the wider context of the year under review to ensure that the vesting reflected the overall performance of the business. These discussions considered all areas of performance across the business, including in relation to compliance with statutory and regulatory obligations, with particular focus on our delivery for customers and the environment. The Committee noted that these areas of performance were factored into the vesting calculations and therefore were reflected in the level of variable pay that vested. The Committee deemed that there was no indication that vesting should be reduced further on a discretionary basis and it was agreed that the vesting calculations fairly reflected the operational, financial, customer and environmental performance in the year.

The LTIP performance over the three-year period indicated a vesting of 39.5% as at 1 May 2022. This was reviewed by the Committee and the calculations independently verified by KPMG. It was agreed that this level of vesting should be approved by the Committee given the targets achieved.

Payments in relation to the EIP and LTIP will be paid to executive directors in July 2022. Further information on the amounts to be received is shown in the Remuneration Policy Report.

The change of CEO

As noted above, we announced in April 2022 that our CEO, Liz Barber, wished to retire from the Board and we also announced the appointment of Nicola Shaw, her successor. Both the remuneration to be paid to Liz upon her departure and the offer to be made to Nicola were matters considered by the Committee post year end, but both have been included in the Remuneration Report this year for completeness.

Feedback

As a private limited company, our Remuneration Report is not subject to a vote at AGM. We are keen, however, to receive any feedback from stakeholders on our remuneration policy, which may be directed to me via our Company Secretary, who can be contacted at compsec@yorkshirewater.co.uk



Ray O'Toole
Chair of the People
and Remuneration Committee
 15 July 2022

Remuneration Policy Report

This Policy Report sets out the Directors' Remuneration Policy for Yorkshire Water and applies from 1 April 2021. There have been no significant changes from the prior year.

Any existing remuneration commitments or contractual arrangements agreed prior to the implementation of this policy will be honoured in accordance with their original terms.

Remuneration payments and payments for loss of office can only be made during the policy period if they are consistent with this policy or are otherwise approved by our shareholders by an ordinary resolution.

Policy overview

The current remuneration policy for directors comprises the elements set out in the table overleaf.

In setting the policy, the Committee considers a number of factors, including:

- The need to align the remuneration policy with the strategic objectives of the business and the interests of customers;
- The need to achieve an appropriate balance between fixed and performance-related pay to incentivise strong long-term performance and sustained shareholder value creation, whilst not encouraging unnecessary risk-taking or irresponsible behaviour;
- Internal levels of pay and employment conditions across the rest of Yorkshire Water;
- The need to provide a remuneration structure that is sufficiently competitive to attract, retain and motivate executive directors of a high calibre;

- The principles and recommendations set out in the UK Corporate Governance Code, the Wates Corporate Governance Principles for Large Private Companies and the Ofwat Board Leadership, Transparency and Governance Principles; and
- Periodic external comparisons of market trends and practices elsewhere in the water industry and in companies of a similar size, complexity and geographic scope.

Our remuneration structure is intended to be simple and transparent and to clearly link pay to performance. Our policy ensures that performance-related components form a significant proportion of the overall remuneration package, with maximum total potential rewards earned only through the achievement of stretching performance targets based on measures selected to promote the long-term success of the company and an enhanced customer experience.

Consideration of pay and employment conditions across the business

The Committee considers the pay and employment conditions of colleagues across the business when setting the remuneration policy for the executive directors, to ensure that these are aligned where appropriate. We regularly monitor pay trends across all levels of the business and salary increases for the directors will normally be in line with those of the wider workforce, in percentage terms.

The Committee seeks views on remuneration from colleagues across the business through the Yorkshire Water Voice survey, which has been conducted once during the year. The results from each survey are considered in detail by the Board and its committees.

Yorkshire Water also has a Colleague Engagement Forum which provides regular input into the people strategy and key decisions in relation to remuneration and terms and conditions. Julia Unwin and Ray O'Toole attend the Forum on behalf of the Board and are therefore able to feedback comments directly to the People and Remuneration Committee. In addition, the minutes from each Forum are shared with all Board members for information and the views expressed are therefore fed into decision-making by the Board and its committees.

How the Committee may exercise discretion

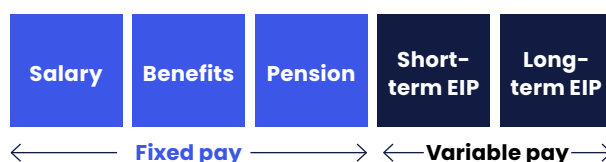
The Committee may exercise discretion in two broad areas for each element of remuneration, as follows:

- To ensure fairness and align executive remuneration with underlying individual and company performance, the Committee may adjust, upwards or downwards, the outcome of any variable pay within the limits of the relevant plan rules. This includes taking into account regulatory or statutory breaches that become apparent in the year under review.
- In the case of a non-regular event occurring, the Committee may apply its discretion to ensure fairness and seek alignment with business objectives. Non-regular events include, but are not limited to corporate transactions, changes in the company's accounting policies, administrative matters, internal promotions, external recruitment, terminations, etc.

Any adjustments in light of corporate events will be made on a neutral basis: this means that the intention of any adjustment will be that the event is not to the benefit or detriment of participants. Adjustments due to underlying performance may be made in exceptional circumstances to ensure outcomes are fair both to shareholders and participants.

Any use of discretion by the Committee during the financial year will be detailed in the Annual Report on Remuneration each year.

The remuneration of our executive directors is made up of five elements:



Executive directors' policy table

Component of remuneration and how it supports the Yorkshire Water strategy	How does this operate and what is the maximum that may be paid?	What performance measures are used and why?	Are there any provisions to recover sums paid?
Fixed pay			
Base salary Setting the base salary at the right level enables us to attract and retain the high calibre individuals required to deliver the strategic objectives of the business.	<p>Salaries are reviewed annually with changes typically effective from 1 April.</p> <p>The review considers the annual salary increases for the workforce generally as well as any other key internal and external reference points, including the calibre and performance of the individual. Base salaries are usually set in line with the market rate for the role when benchmarked against other water companies or other utility companies, whilst also taking into consideration market rates in both the FTSE 250 and FTSE 100 for similar roles.</p> <p>There is no prescribed maximum annual basic salary or salary increase.</p> <p>Increases will not normally exceed the general level of increase for colleagues across the business in percentage of salary terms; however, we may award higher increases in certain circumstances, for example, where there is a change in responsibility, progression in the role or a significant increase in the scale of the role or the size or complexity of the business.</p> <p>Details of the base salaries for each of the executive directors are shown in the Annual Report on Remuneration.</p>	<p>No specific performance measures are used in relation to determining base salary, but individual and business performance are considered as part of the discussion when setting the base salary levels.</p>	<p>There are no provisions to recover any sums paid.</p>

Component of remuneration and how it supports the Yorkshire Water strategy	How does this operate and what is the maximum that may be paid?	What performance measures are used and why?	Are there any provisions to recover sums paid?
Fixed pay			
Benefits Paying the right level of benefits helps us to attract and retain the right individual for the role to deliver the strategic objectives of the business.	<p>The provision of benefits is set based upon general market practice, considering the benefits available to other colleagues across the business.</p> <p>The benefits available to executive directors may include a combination of:</p> <ul style="list-style-type: none"> • Private medical insurance for the executive and their spouse; • Life assurance; • A choice of company car-lease or a car allowance of up to £12,000 per annum for the CEO and £7,500 for the CFO; • Medical screening; and • Optional private fuel provision. <p>Executive directors will be eligible for any other benefits which are introduced for the wider workforce on broadly similar terms.</p> <p>We also reimburse normal business-related expenses for our executive directors.</p> <p>The cost of benefits may vary from year to year and there is no maximum level set.</p>	Benefits are not performance-related.	There are no provisions to recover any sums paid.
Retirement benefits Retirement benefits are paid as part of a market competitive package which, in turn, helps us to attract and retain high calibre individuals to deliver the strategic objectives of the business.	Executive directors are entitled to receive a company contribution to the defined contribution stakeholder scheme of up to 10% of basic salary. Alternatively, they can elect to receive a cash allowance of up to 10% of basic salary or a combination of a company contribution to the defined contribution stakeholder scheme and a cash allowance.	Retirement benefits are not performance-related.	There are no provisions to recover any sums paid.

Component of remuneration and how it supports the Yorkshire Water strategy	How does this operate and what is the maximum that may be paid?	What performance measures are used and why?	Are there any provisions to recover sums paid?
Variable pay			
<p>EIP – short-term element</p> <p>The short-term element of the EIP is designed to ensure focus on short-term priorities for the benefit of customers, shareholders and other stakeholders, such as the environment.</p> <p>The combined elements of the EIP represent a significant proportion of the overall remuneration package and incentivise outperformance against targets.</p>	<p>Performance targets are set at the beginning of the year by the Committee with up to 150% of base salary vesting each year depending on the performance against the targets set, as determined by the Committee.</p> <p>All payments are at the ultimate discretion of the committee.</p> <p>20% of the maximum is payable for achieving the threshold hurdle, rising to 80% of maximum at target level and with payments of up to 100% of the maximum level for stretch performance.</p> <p>The high threshold and target levels reflect the greater emphasis placed on variable pay by the Committee.</p>	<p>A balance of financial and non-financial measures is selected by the Committee at the start of each year.</p> <p>All targets are clear, stretching and measurable and use a combination of the main KPIs for the company and progress on transformational projects.</p> <p>The measures agreed for 2023 are set out in more detail later in this report.</p> <p>In addition to the performance measures set by the Committee, there is an underpin that the Committee must be satisfied that the financial and non-financial performance of the business over the performance period warrants the level of vesting.</p>	<p>Payments are subject to clawback in the event of misstatement of performance, errors in the assessment of performance conditions or misconduct.</p>

Component of remuneration and how it supports the Yorkshire Water strategy	How does this operate and what is the maximum that may be paid?	What performance measures are used and why?	Are there any provisions to recover sums paid?
Variable pay			
EIP – long-term element	<p>The long-term element of the EIP is subject to the same performance measures as the short-term element in year one. The maximum award for the long-term element is 150% of base salary but this is then capped by the performance level in year one, with the capped amount being deferred in equal instalments to years three, four and five of the scheme.</p>	<p>The performance measures in year one are described later in this report.</p>	<p>Payments are subject to clawback in the event of misstatement of performance, errors in the assessment of performance conditions or misconduct.</p>
<p>The long-term element of the EIP is designed to ensure focus on long-term business goals and sustainability for the benefit of customers, shareholders and other stakeholders, such as the environment.</p> <p>The combined elements of the EIP represent a significant proportion of the overall remuneration package and incentivise outperformance against targets.</p>	<p>The instalments in years three, four and five are then subject to further longer-term performance measures which may reduce the vested amount further. These measures relate to financial, human, social and environmental capital and all require the position at the end of year one to have been maintained when it is measured again at the end of years three, four and five respectively.</p>	<p>The longer-term performance measures are designed to ensure that performance does not deteriorate after the in-year payment is made and to ensure that in year performance is not being enhanced to the detriment of the longer term.</p>	
	<p>All payments are at the ultimate discretion of the Committee.</p>	<p>In addition to the performance measures set by the Committee, there is an underpin that the Committee must be satisfied that the financial and non-financial performance of the business over the performance period warrants the level of vesting.</p>	

Non-executive directors' policy table

Component of remuneration and how it supports the Yorkshire Water strategy	How does this operate and what is the maximum that may be paid?	What performance measures are used and why?	Are there any provisions to recover sums paid?
Fees Fees are set to provide competitive pay to enable us to attract and retain the right calibre of individual and the right balance of skills on the Board.	<p>Fees are reviewed annually. Any increase will be guided by changes in market rates, time commitments and responsibility levels as well as by increases for the broader colleague population.</p> <p>The Chair is paid an all-encompassing fee to take account of all Board responsibilities. The other independent non-executive directors receive a base fee with additional fees paid for additional responsibility, such as the chairing of a committee or performing the role of the Senior Independent Director.</p> <p>In exceptional circumstances, if there is a temporary yet material increase in the time commitments for independent non-executive directors, the company may pay extra fees to recognise the additional workload.</p> <p>We reimburse all of our non-executive directors for any normal business-related expenses.</p>	<p>Fees are not performance-related; however, performance is addressed through regular one-to-one meetings between the Chair and each independent non-executive director. The performance of the Chair is reviewed at one-to-one meetings between the Chair and the Senior Independent Director.</p>	<p>There are no provisions to recover any sums paid.</p>

How does the remuneration policy for executive directors differ from that of other colleagues?

Overall, the remuneration policy set for the executive directors is more heavily weighted towards performance-related variable pay than for other colleagues. As such, a greater proportion of their remuneration is dependent upon the successful delivery of the business strategy.

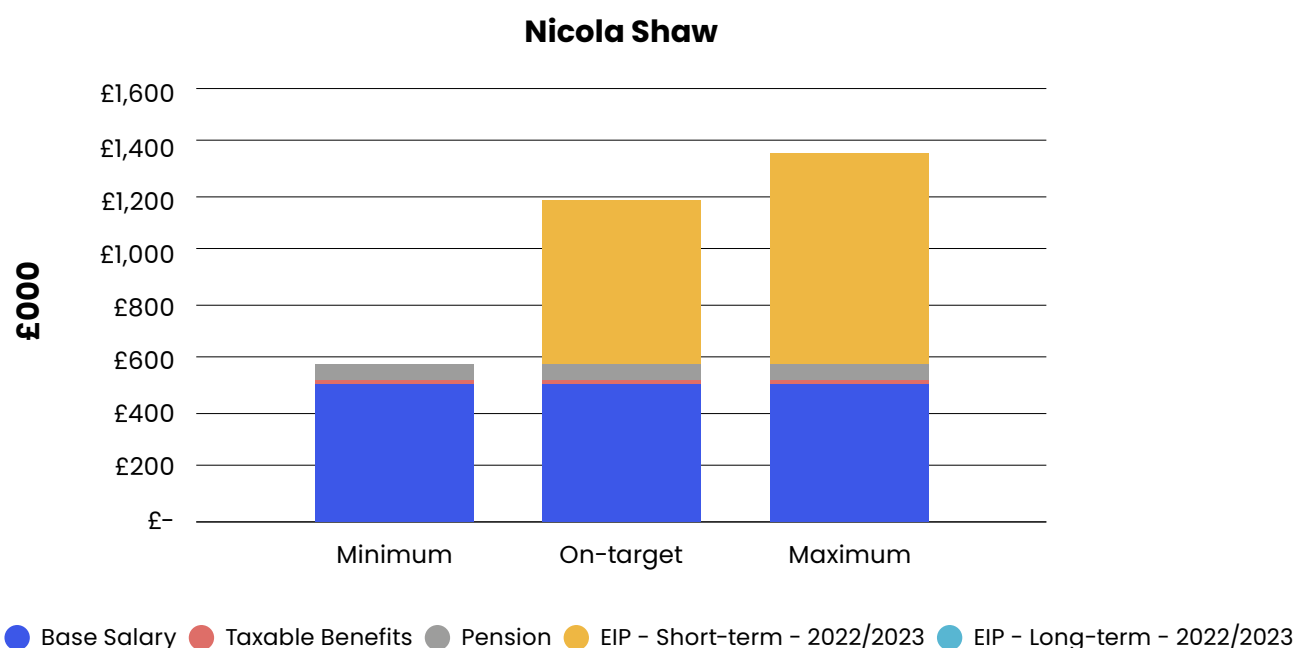
The key differences are noted in the table below:

Remuneration component	Difference
Base salary	<p>Base salaries are reviewed in the same way for executive directors as for other senior colleagues, considering market rate information, internal reference points, individual performance, the scope of the role, the financial performance of the business and the average increases across the rest of the business.</p> <p>Most colleagues are covered by collective agreements which are negotiated based on our principles of affordability, fairness and transparency. The outcome of these negotiations is also taken into account when considering pay increases for other colleagues.</p> <p>We pay all colleagues, contract partners and service providers salaries at least equivalent to the voluntary real living wage.</p>

Remuneration component	Difference
Benefits	An increasing level of benefits is offered to colleagues as their job level increases. Those offered to the executive directors are consistent with those offered to other senior colleagues, with a slightly higher car allowance offered to the Chief Executive Officer.
Retirement benefits	All colleagues are entitled to pension contributions from Yorkshire Water. The amount contributed increases as the colleague contribution increases. The policy for executive directors is consistent with colleagues across the business with a maximum company contribution of 10% of base salary.
EIP	<p>Long-term incentive awards are made only to those individuals who are most able to directly influence the business strategy. Along with the executive directors, senior leaders are also invited to participate in the EIP. The performance measures and performance period are the same for all participants in the scheme. The level of award increases with seniority.</p> <p>Colleagues in Band 3 participate in an annual bonus scheme with payments of up to ten or 15 per cent of salary, dependent on role. All other colleagues participate in a bonus scheme which pays up to £1,000 per annum depending on company performance.</p>

What might executive directors be paid under the remuneration policy for 2023?

The charts below indicate how much the executive directors might receive under the remuneration policy for 2022/2023 on a fixed, on-target and maximum basis.



Chris Johns

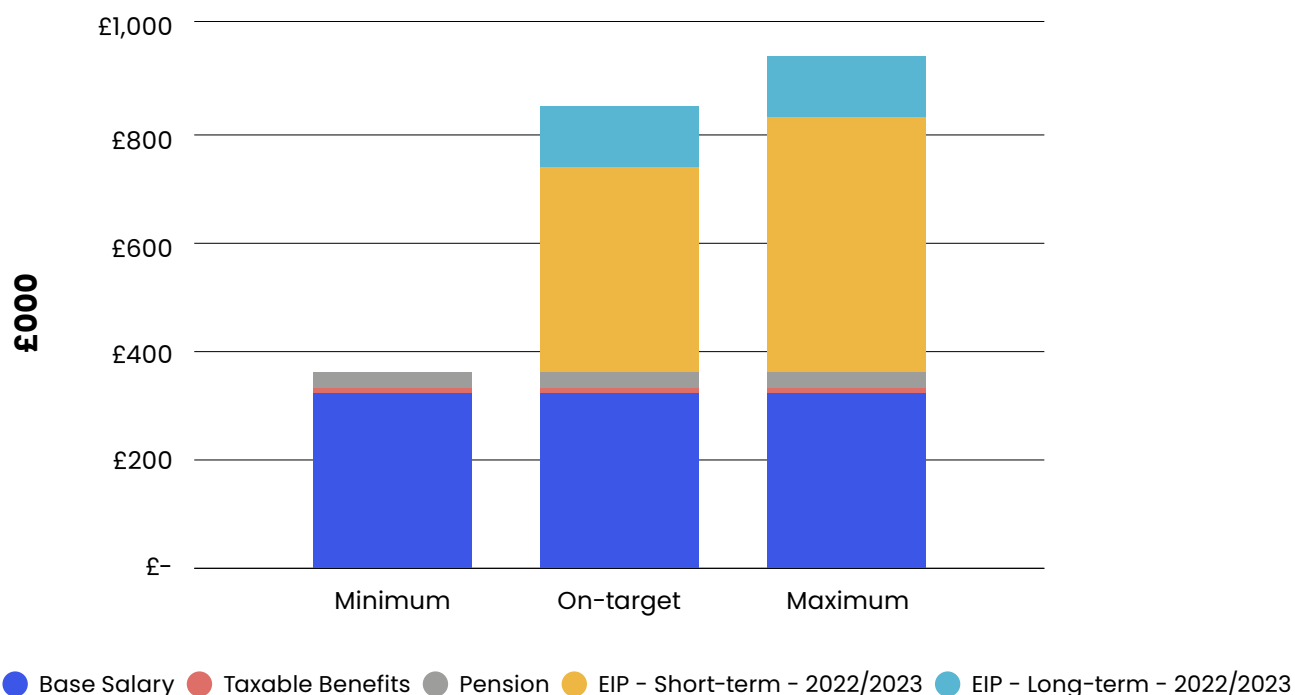


Chart assumptions

The different scenarios shown in the graphs are:

- **Minimum** – where performance is below threshold and executive directors receive fixed pay only with no vesting under the EIP. Fixed pay comprises base salary, benefits and retirement benefits;
- **On-target** – where executive directors receive their fixed pay plus an EIP on-target pay-out of 80% of the maximum opportunity for the short-term element vesting in 2023 and 100% of the long-term element vesting in 2023, which was capped at 84% through the vesting in 2021;
- **Maximum** – where performance meets or exceeds the maximum and the executive directors receive their fixed pay plus the maximum in-year vesting of the EIP and 100% of the long-term element vesting in 2023, which was capped at 84% through the vesting in 2021.

The charts above do not reflect the remuneration to be paid to Liz Barber due to her retirement from the business. Instead they show the remuneration to be paid to Nicola Shaw from her date of appointment on 9 May 2022. Information on the payments made to Liz Barber upon her departure is included later in this report. It should be noted that the charts show what could be earned by the executive directors based on the 2023 remuneration policy and the numbers will therefore differ from those included in the table later in this report which details what was actually earned by the executive directors in the year to 31 March 2022.

Recruitment policy

The remuneration package for a new executive director would be set in accordance with the terms of the prevailing remuneration policy at the time of appointment, considering the skills and experience of the individual, the market rate for a candidate of that experience and the importance of securing the relevant individual.

The table below sets out our policy on the recruitment of new permanent executive directors for each element of the remuneration package:

Remuneration component	Policy on recruitment
Base salary	<p>The salary would be provided at such a level as required to attract the most appropriate candidate. The aim would be to pay the appropriate market rate for the role when benchmarked against other water companies or other utilities, in line with the current policy for existing executive directors.</p> <p>Where it is appropriate to set a lower salary initially, a series of increases above the level awarded to the wider workforce may be given over the following few years until the desired position is achieved, subject to individual performance. This may apply to those promoted internally in the business as well as to those recruited from outside.</p>
Benefits	<p>The benefits package we will offer will be set in line with the policy for existing executive directors.</p> <p>In addition to the benefits currently available to existing executive directors, we may also offer an allowance to cover relocation, travel and/or incidental expenses as appropriate.</p>
Retirement benefits	<p>The maximum pension contribution will be set in line with the policy for executive directors at up to 10% of base salary.</p>
EIP	<p>EIP awards will be made in line with the policy for other executive directors. In the year of recruitment an award may be made at a date outside of the usual annual awards, at the discretion of the Committee.</p> <p>Different performance measures may be set initially at the discretion of the Committee, depending on the point in the financial year at which the individual joins. The award made will be pro-rated to the period of employment, with both the in-year and deferred vesting amounts pro-rated accordingly.</p>
Buy-outs	<p>In addition to the above, we may also offer additional cash when we consider this to be in the best interests of shareholders and the business. Any such payments would be based solely on remuneration relinquished when leaving the former employer and would reflect, as far as possible, the nature and time horizons attaching to that remuneration and the impact of any performance conditions.</p> <p>Our policy on 'buying-out' of existing incentives granted by the executive's previous employer will depend on the circumstances of recruitment and will be negotiated on a case-by-case basis. There will not be a presumption in favour of buy-out, but it will be considered if necessary to attract the right candidate.</p>

In total the maximum variable pay level in the year of appointment – excluding the value of any buy-out awards – will be 150% of base salary through the EIP award.

For an internal executive appointment, any variable pay element awarded in respect of the prior role would be allowed to pay out according to its terms, adjusted as appropriate to take into account the appointment. In addition, any other ongoing remuneration obligations existing prior to appointment would be allowed to continue.

The appointment of Nicola Shaw

We announced on 7 April 2022 that a new Chief Executive Officer, Nicola Shaw, would be joining the business on 9 May 2022. Nicola joins during a period of significant change for Yorkshire Water through the ongoing transformation programme, as well as increasing regulatory pressure across the sector. In addition, the Board is keen for the company to improve its operational performance relative to its peers.

The Board believes that Nicola has the experience and expertise to be able to deliver in these areas. The Committee reviewed the remuneration to be offered to Nicola in this context, taking into account her vast experience in the successful running of regulatory businesses across a number of sectors and her considerable experience in over-seeing successful transformation programmes in a number of different businesses. In addition, her role was benchmarked against similar roles in both the FTSE 250 and FTSE 100 to obtain a view of the appropriate market rate for the role.

The Committee concluded that the base salary to be offered to Nicola should be £574,000, with a car allowance of £12,000 and the rest of her benefits and remuneration in line with that offered to our previous Chief Executive Officer, Liz Barber.

Given the need for Nicola to relocate to Yorkshire, the Committee has also agreed to pay relocation expenses of up to £140,000 in accordance with the existing Remuneration Policy.

Non-executive director recruitment

The fee structure for independent non-executive director appointments will be based on the independent non-executive director fee policy as set out in the policy table.

The appointment of Russ Houlden

Our investor directors do not receive any remuneration for their role as directors on our Board. Therefore Russ Houlden, who was appointed to the Board on 19 January 2022, will not receive any remuneration for his role and receives no other benefits or variable pay from the business.

Service contracts

Our policy is to set notice periods for executive directors at six months' notice from either party. The current service agreement dates are set out in the table below:

Director	Date of appointment	Date of current service agreement
Liz Barber	24 November 2010 ¹	15 July 2019
Nicola Shaw	9 May 2022	6 April 2022
Chris Johns	1 June 2020	27 September 2019

¹ Liz Barber joined the Board as Group Director of Finance and Regulation on 24 November 2010. She then became CEO on 12 September 2019 and stepped down from the Board on 6 May 2022. She will leave the business on 31 December 2022.

Letters of appointment

Independent non-executive directors are appointed by letters of appointment for a period of two years. Appointments may be renewed by mutual agreement for further periods of up to two years subject to a total period of nine years' service with the company. The letters of appointment allow for termination by either party without a requirement for notice.

The appointment of the Chair is for a period of three years and may be renewed by mutual agreement for further periods of up to three years, subject to a total period of nine years' services with the company. The notice period is set at three months for either party.

The dates of the current letters of appointment are noted in the table below:

Director	Date of appointment	Date of current letter of appointment
Vanda Murray	July 2021	27 May 2021
Andrew Merrick	June 2019	27 May 2021
Ray O'Toole	June 2014	26 May 2022
Julia Unwin	January 2017	25 November 2000
Andrew Wyllie	September 2017	9 July 2021

The following non-executive director appointments were made in accordance with Clause 4 of the Shareholders Agreement dated 2010. This permits investors to appoint representatives to the company in accordance with their holdings.

Non-executive director	Appointed
Scott Auty	September 2017
Andrew Dench	September 2017
Russ Houlden	January 2022

Payments to executive directors who leave the business

The table below sets out our policy on payments in relation to executive directors who leave Yorkshire Water.

The Committee is clear that contractual entitlements will be honoured, there will be a consistent approach to exit payments and no reward for poor performance. We will not pay anything if an executive director is dismissed for serious breach of contract, serious misconduct or under-performance or for acts that bring the executive director or Yorkshire Water into serious disrepute.

Remuneration component	Treatment on exit
Base salary	Salary will be paid for the contractual notice period. Where appropriate, we will seek to mitigate any payments due, however the Committee has discretion to make a lump sum payment on termination in lieu of notice.
Benefits and retirement benefits	Benefits and retirement benefits will normally continue to be provided over the notice period. Where appropriate, we will seek to mitigate any payments due, however the Committee has discretion to make a lump sum payment on termination equal to the value of the benefits payable during the notice period.
Variable Pay Schemes	<p>Normally awards will lapse on cessation of employment, unless the Committee determines that the executive is a good leaver. Good leaver principles have been agreed by the Committee and status is usually conferred for one of the following reasons: death, ill health, injury or disability, a change of control, redundancy or other circumstances at the discretion of the Committee. Good leavers will be treated in accordance with the rules of the specific scheme. Colleagues leaving on the grounds of retirement will be considered on a case-by-case basis.</p> <p>Good leavers may request to receive payment of their outstanding EIP long-term elements in the July following their departure from the business, in exchange for a discount of 25% in recognition of the early settlement. Agreement to this is entirely at the discretion of the Committee.</p>

In relation to a termination of employment, the Committee may make payments in relation to any statutory entitlement or payments to settle compromise claims as necessary. The Committee also retains the discretion to reimburse reasonable legal expenses incurred in relation to a termination of employment and to meet any transitional costs if deemed necessary. Payment may also be made in respect of accrued benefits, including untaken holiday entitlement.

Payments on a change of control, where a director's employment is adversely changed, will be as on termination. There will be no enhanced provisions on a change of control.

The departure of Nevil Muncaster

As previously noted, Nevil Muncaster resigned from the Board on 31 July 2021 to accept a role elsewhere in the water sector. He was paid his base salary and benefits up to the date of his departure in accordance with his contractual entitlement. The Committee agreed that voluntary resignation did not qualify for good leaver status and therefore any payments that Nevil would have been entitled to under the EIP or LTIP following his departure will lapse.

The departure of Liz Barber

Post year end we announced that Liz Barber would be retiring from the Board with effect from 6 May 2022. The Committee agreed that Liz would receive her contractual remuneration until 31 December 2022 to enable a smooth handover to her successor and to cover her contractual notice period. The Committee also agreed that she would qualify as a good leaver in line with the rules of the LTIP and EIP scheme and would therefore receive payments under both of these schemes subject to vesting performance and pro-rated to the date of the end of her notice period on 31 December 2022. The Committee exercised its discretion to agree with Liz that all outstanding pro-rated awards would be paid in July 2022, with those being paid early reduced by 25% to reflect the early settlement. Details of the amounts due to be paid to Liz in July 2022 are shown later in this report.

The non-executive directors' letters of appointment do not include any compensation for loss of office.

Policy on outside appointments

We believe that where executive directors hold directorships in other companies, Yorkshire Water can benefit from their experience. As a result, and subject to the Board's prior approval, executive directors may take on one substantial external non-executive directorship and retain the fees earned.

Annual Report on Remuneration

This part of the Directors' Remuneration Report sets out the amounts we have paid to directors for the year ended 31 March 2022 and describes how the policy will be implemented in 2023.

The financial information contained in this part of the report has been audited where indicated.

Single total figure table (audited)

	Current directors				Past director			
	Liz Barber		Chris Johns ¹		Nevil Muncaster ²		Total	
	2022 £'000	2021 £'000	2022 £'000	2021 £'000	2022 £'000	2021 £'000	2022 £'000	2021 £'000
Base salary	443	435	308	250	75	226	826	911
Taxable benefits	9	9	9	7	3	9	21	25
Retirement benefits³	44	52	31	30	9	27	84	109
Sub-total	496	496	348	287	87	262	931	1,045
EIP – short term element	286	548	199	315	–	285	485	1,148
EIP – long-term element⁴	393	–	–	–	–	–	393	–
Exceptional bonus⁵	–	–	–	–	–	34	–	34
LTIP⁶	244	272	–	–	–	114	244	386
Sub-total	923	820	199	315	–	433	1,122	1,568
Total	1,419	1,316	547	602	87	695	2,053	2,613

¹ Chris Johns joined the Board on 1 June 2020. The payments in the table above reflect the payments made to Chris since his appointment.

² Nevil Muncaster left the Board on 31 July 2021. The payments in the table above reflect the payments made to Nevil prior to his departure. No payments have been made following his departure.

³ Liz Barber opted for a full salary supplement instead of a contribution to the Kelda Stakeholder+ Plan. She received a cash sum of £44,291 (2021: £52,000) in the year. Chris Johns is a member of the Kelda Stakeholder+ Plan with a partial salary supplement. He received a total cash sum of £24,681 (2021: £19,500) and a pension contribution of £6,170 (2021: £10,500). Nevil Muncaster opted for a full salary supplement instead of a contribution to the Kelda Stakeholder+ Plan. He received a cash sum of £9,040 (2021: £27,120) in the year.

⁴ The long-term elements of the EIP were not due to be paid until July 2023 onwards but as part of the remuneration arrangements agreed with Liz Barber on her retirement from the business, it was agreed by the Committee that the long-term elements would be settled early in July 2022 in return for a discount of 25% to reflect the early settlement. These have also been pro-rated to the date of her departure from the business on 31 December 2022.

⁵ The Committee agreed in May 2021 to exercise its discretion and pay an exceptional one-off bonus of 15% of base salary to Nevil Muncaster in recognition of his exceptional performance and considerable additional effort in the year ended 31 March 2021.

⁶ The figures included above for the LTIP that vested during the year relate to the LTIP awards granted in 2019 which vested on 1 May 2022. Further details of the scheme and the vesting are detailed later in this report.

EIP

The EIP is a rolling five-year plan which began in 2020, with awards made with effect from 1 April each year. There are two elements to the scheme, a short-term element with a performance period of one year and a long-term element which potentially vests in equal instalments at the end of years three, four and five. The long-term element is capped at the same percentage that vests for the short-term element and is also subject to further performance criteria which may reduce the vesting further in years three, four and five. Details of the specific targets relating to each award set out in the Annual Report on Remuneration the following year.

Awards will not vest unless the Committee is satisfied that the underlying financial and non-financial performance has been satisfactory over the performance period, considering any relevant factors, including the regulatory regime in place. The Committee has authority to exercise its discretion to reduce the level of vesting to any extent considered appropriate. Any amounts that vest are paid in cash to participants in July of each year.

Awards made in 2021

Awards of up to 150% of base salary for the short-term element and 150% of base salary for the long-term element were made to Liz Barber and Chris Johns with effect from 1 April 2021. The performance period for the short-term element ran to 31 March 2022.

The Committee assessed performance in the year against the performance criteria set out below. This indicated that the vesting was at 43.0%. The Committee considered this, taking into account the overall performance of the business during the year and the pay and conditions elsewhere in the business. This included careful consideration of regulatory performance in the year, particularly in relation to environmental matters and customer delivery. In the two measures requiring Committee assessment, the view was taken that half of the maximum amount available would be awarded to accurately reflect performance in the year. The Committee concluded that no further discretionary reduction should be applied and that the vesting calculations accurately reflected the underlying performance of the business in a challenging year. This means that 43.0% of the 150% maximum, equivalent to 64.5% of base salary, will be paid in cash to the executive directors in July 2022, with 43.0% of the 150% maximum of the long-term element carried forward and released, subject to the further performance criteria set out below, in three equal cash instalments in July 2024, July 2025 and July 2026. Any amounts that vest under this scheme will be reported in the Directors' Remuneration Reports for the years ended 31 March 2024 to 2026.

The performance measures for the short-term element vesting in March 2022 are shown below:

EIP short-term element performance					
		Threshold level – vesting starts to accrue	Target level – 80% of maximum vesting generated	Maximum level – maximum vesting generated	Actual performance
Target	Weighting	Performance required	Performance required	Performance required	Performance achieved
Financial – 10%					
Operating cash	10%	£20m below business plan	In line with business plan	£20m above business plan	10%
Delivering for customers – 75%					
Total operating expenditure (excluding exceptionals)	15%	£20m more than business plan	In line with business plan	£10m less than business plan	–
Capital expenditure	15%	£20m more than business plan	In line with business plan	£20m less than business plan	15%
Accrued ODIs*	20%	£5m worse than business plan	In line with business plan	£5m better than business plan	–
Customer satisfaction – C-MeX	5%	9th	9th	8th	–
Health and safety – LTIR	5%	0.297	0.27	0.243	5%
Operational carbon – tonnes	5%	95,572	86,884	78,195	3.5%
Environment – EPA rating	5%	2*	3*	3*	1%
Colleague engagement survey score	5%	7.2	7.4	7.6	1%
Strategic – 15%					
Transformation milestones	10%	Assessment by Committee	Assessment by Committee	Assessment by Committee	5%
Public value, strategy and PR24 plan	5%	Assessment by Committee	Assessment by Committee	Assessment by Committee	2.5%

* Our accrued ODI measure relates to the ODIs set as part of our five-yearly price review and which measure our performance throughout the AMP.

These performance measures were selected by the Committee to reflect the priorities of the business both during 2022 and in the longer-term and to reflect the needs of stakeholders through 75% of the performance being aligned to the needs of customers, people, and the environment.

EIP long-term measures

The measures that have been agreed by the Committee for the long-term element of the scheme are to be confirmed by the Committee in September 2022. Performance against these measures will be reported in the Remuneration Report for the year ended 31 March 2024 onwards.

All of the measures chosen by the Committee for the short-term and long-term elements of the scheme are carefully selected to ensure that the schemes drive the right behaviour amongst our senior executives and align with the needs of the business and those of our key stakeholders. Financial measures are selected as the business needs to be run efficiently to ensure that we are not wasting customer money and that we are maximising the money available for investment to protect the business in the longer-term. Measures relating to customers, people, the environment and the community align directly with our ambition to put people at the heart of everything we do and align directly with the requirements of our regulator, Ofwat. Overall 75% of the measures for the short-term element of the scheme align directly with the needs of these stakeholders in the scheme that vested this year. The measures are being reviewed again for the award made in April 2023 to ensure that these continue to align our senior leaders with the objectives of the business and the needs of our stakeholders. Details of the measures chosen will be disclosed in our Annual Report in 2023.

The importance of linking the environment to our variable pay

There has been much external focus in recent times on the role that water companies play in relation to the environment. As set out in our ARFS we recognise the importance of the environment in all that we do at Yorkshire Water. We have a significant impact on the environment around us and are reliant on it for our water resources, now and always. The Committee has sought to reflect this in our variable pay measures.

We have two measures in the short-term element of our EIP which link directly to the environment; our operational carbon measure and our EPA rating. The EPA rating is calculated by the EA and includes factors such as our compliance with environmental permits and the number of pollution incidents each year. We also have an ODI measure in the short-term element of the scheme which makes up 20% of the short-term variable pay. This is made up of a number of measures, several of which relate directly to the environment through measuring leakage, sewer collapses, pollution incidents, treatment work compliance, operational carbon and bathing water quality. This is equivalent to one third of the ODI measure, meaning that a total of 16% of the short-term element of our EIP is directly related to our environmental performance.

We have also previously attributed 16% of the measures for the long-term element of the scheme directly to environmental matters, namely carbon emissions and our EPA rating. This means that overall across both the short-term and long-term elements of the scheme, 32% of the variable pay each year has been directly linked to performance in relation to the environment. The long-term measures for the scheme that has vested in 2022 are yet to be confirmed by the Committee.

Outstanding awards under the EIP as at 31 March 2022

The long-term element of the EIP scheme is carried over to subsequent years. The current amounts being carried forward are set out below:

	Liz Barber		Chris Johns		Past director Nevil Muncaster
Effective date of award	01.04.2020	01.04.2021	01.06.2020	01.04.2021	01.04.2020
Awards outstanding at 1 April 2021 £'000	548	-	315	-	285
Awards made in the year £'000	-	286	-	199	-
Vested during the year £'000	295 ¹	97 ¹	-	-	-
Lapsed during the year £'000	253 ¹	189	-	-	285
Awards outstanding at 31 March 2022 £'000	-	-	315	199	-
Awards already vested in previous years £'000	548	286	315	199	678
Face value of maximum total award £'000	-	-	750	926	-
Total % that would vest at threshold performance %	-	-	20%	20%	-

The Committee approved that Liz Barber should receive the outstanding elements of her EIP awards early. These will be paid in July 2022 and the figures above reflect the pro-rating to the date of her leaving the business on 31 December 2022 and a discount of 25% to reflect the early settlement.

LTIP

The LTIP was a rolling three-year plan based on the achievement of specific performance conditions with targets set at the start of each performance period. Any amounts that vest are paid in cash to participants in July of each year with the last performance period for the scheme ending on 1 May 2022.

LTIP awards vesting in 2022

On 1 April 2019, awards were granted to Liz Barber equivalent to 200% of base salary at that time and to Nevil Muncaster equivalent to 150% of base salary at that time. The specific targets attached to the LTIP awards granted in 2019, and the performance achieved in the three-year period to 31 March 2022, are shown in the table below.

Performance Condition	Performance
Cash flow performance over the performance period:	
< 90% of target – no LTIP vesting	Adjusted EBITDA indicates a vesting of 62.4%.
90% but < 100% of target – vesting pro-rated between 1% and 70%	
100% but < 120% of target – vesting pro-rated between 70% and 100%	
120% or higher of target – vesting at 100%	
The performance above could then be reduced by the percentage indicated if the performance measures below were not met:	
People – 20%	
Health and safety measure – 10%	Targets met
Colleague engagement measure – 10	Target not met – 6.2% net deduction
Customer experience – 40%	
AMP7 customer service related PCs	Targets partially met – 12.5% net deduction
Resilience – 40%	
AMP7 resilience-related PCs	Targets substantially met, however, 4.2% net deduction

The performance in the year therefore indicated a vesting of the 2019 LTIP awards of 39.5%. This was discussed by the Committee and the calculations were independently verified by KPMG. It was decided that the vesting reflected actual performance in the year and therefore the vesting of 39.5% was approved for payment in July 2022.

The vesting in May 2022 marks the end of the LTIP and there are therefore no outstanding awards carried forward.

Payments for loss of office (audited)

No payments have been made for loss of office during the year under review.

Payments to past directors (audited)

A payment will be made in July 2022 to Richard Flint who is a past executive director of the company. This payment relates to the LTIP vesting in 2022 and amounts to £114,542.

No other payments to past directors were made in the year.

Independent non-executive directors

Single total figure table (audited)

The total annual fees paid to each non-executive director are shown below.

Non-executive director	2022 £'000	2021 £'000
Anthony Rabin^{1,3}	115 ²	275
Vanda Murray^{1,2}	206 ³	-
Andrew Merrick	60	60
Raymond O'Toole	70	70
Julia Unwin	60	60
Andrew Wyllie	60	60

¹ The fees for Vanda Murray and Anthony Rabin includes their other responsibilities in relation to other Kelda Group Limited companies but are shown here in full.

² Vanda Murray joined the Board on 1 July 2021 so her fee was pro-rated from that date.

³ Anthony Rabin retired from the Board on 1 September 2021 and therefore his fee is pro-rated to that date. He continued to receive his salary until 30 November 2021 in accordance with his contractual entitlement, which amounted to a further payment of £68,750 in addition to the fee shown above.

The investor directors do not receive any remuneration from Yorkshire Water.

Remuneration of the CEO

The table below sets out the remuneration for our CEO in each of the last ten years.

	2022 £'000	2021 £'000	2020 £'000	2019 £'000	2018 £'000	2017 £'000	2016 £'000	2015 £'000	2014 £'000	2013 £'000
Total remuneration	1,419	1,316	1,469	1,328	932	1,328	1,231	1,291	861	1,288
Annual bonus paid against maximum opportunity	43.0%	84.0%	74.8%	64.6%	67.7%	73.5%	60.0%	87.0%	80.0%	85.0%
Long-term incentive vesting against maximum opportunity	39.5%	45.3%	74.8%	50.0%	-	50%	50%	75%	-	60.0%

Chief Executive Officer pay ratio

The table below shows the pay ratio of our Chief Executive Officer in the year indicated as required by the Companies (Miscellaneous Reporting) Regulations 2018.

Year	Method	25 th percentile pay ratio	Median pay ratio	75 th percentile pay ratio
2022	Option A	34:1	27:1	20:1
2021	Option A	46:1	35:1	26:1

We have chosen Option A to prepare the calculations as this is considered to be the most statistically accurate methodology and aligns with the approach taken last year. The ratios were calculated with reference to the total pay and benefits of the workforce presented in the table on the below page and the single total remuneration of the CEO presented in the Single Total Figure Table. The following was considered as part of the calculation:

- Identifying all colleagues who received a base salary during the year ended 31 March 2022 and who were still employed on that date;
- Using the total pay and benefits received in respect of the year ended 31 March 2022, including bonuses earned for performance in the financial year and paid in July following the end of the financial year;
- Uplifting certain pay elements for colleagues who were employed on a part-time basis or who were not employed for the full financial year;
- Taking into account any changes in working hours during the reporting period and adjusting relevant pay elements accordingly; and
- Using the employer contribution to the defined benefit pension schemes in order to reduce administrative complexity.

Our CEO has a significant proportion of her remuneration linked to variable pay and therefore it is expected that the ratios will vary each year depending on the outcome of the variable pay scheme, the EIP. Participation in the EIP is currently limited to approximately 30 colleagues, with none of the individuals identified as the 25th percentile, median or 75th percentile participating in the EIP.

For the third year in a row we have observed a decrease in the pay ratio compared with the prior year. This is primarily driven by a decrease in the variable pay outcomes for the CEO, however, we have also seen a rise in median base salary and total pay and benefits this year which has also contributed to the reduction of the ratio.

We are mindful of the inflationary pressures that are impacting our workforce and are committed to paying our colleagues in accordance with the Real Living Wage. We also paid eligible colleagues a bonus this year, which was paid in two tranches to ease the cost of living pressure. We conduct an annual salary review that is underpinned by market benchmarking to ensure we offer competitive and fair rates of pay across the organisation.

Presented in the table below are the base salary and the total pay and benefits for those colleagues at the 25th percentile, the median and the 75th percentile:

	25 th percentile	Median	75 th percentile
Base salary	£21,546	£27,798	£37,194
Total pay and benefits	£30,046	£38,370	£50,249

The pay ratio calculation shows that, in total remuneration terms, the CEO earns 27 times (2021: 35 times) that of the median employee. These calculations have been independently verified by Ernst and Young.

We have a whole range of policies and practices to ensure that colleagues are fairly rewarded. We also conduct an annual salary review that is underpinned by market benchmarking to ensure competitive and fair rates of pay are offered throughout the organisation.

Change in remuneration

The table below sets out the change in the remuneration of the Chief Executive Officer from the prior year in comparison to the average percentage change in respect of managers at Yorkshire Water and all colleagues:

	% change in element between 2021 and 2022		
	Salary	Taxable benefits ¹	Annual bonus
CEO	1.8% increase	No change	47.9% decrease
All colleagues	7% increase	No change	14.8% decrease

¹ Taxable benefits include healthcare, car allowance and fuel provision for colleagues who receive such benefits.

The salary has been calculated by looking at colleagues in the same role on 31 March 2022 and as at 31 March 2021 and calculating the change in salary between those two dates.

Relative spend on pay

The table below sets out the relative spend on pay for Yorkshire Water as a whole in comparison to distributions to shareholders:

	Year ended 31 March 2022 £m	Year ended 31 March 2021 £m	Percentage change %
Total remuneration cost for all colleagues¹	188.4	171.2	10.0%
Total distributions made²	52.6	45.2	16.4% ³

¹ The total remuneration cost for all colleagues is taken from note 4 to the Financial Statements and includes wages and salaries, social security costs and other pension costs.

² Total distributions made consists of £52.6m (2021: £45.2m) of distributions made to the parent company to make interest and loan payments.

³ In 2020 additional dividends were paid to substantially cover 2021 head office costs, reducing the dividend payments required in 2021.

Implementation of policy for 2023

The table below sets out how we will implement the Remuneration Policy for the 2023 financial year:

Implementation in 2023	
Base salary	<p>The Committee reviewed base salaries in March 2022 and agreed an increase of 3.0% for Chris Johns to align with the rest of the workforce.</p> <p>The base salaries for 2023 are therefore as follows:</p> <ul style="list-style-type: none"> • Liz Barber: £442,909 from 1 April 2022 to 31 December 2022. • Nicola Shaw: £574,000 from 9 May 2022. • Chris Johns: £317,764 from 1 April 2022.
Benefits	Benefits remain unchanged from 2022.
Retirement benefits	Retirement benefits remain unchanged from 2022.
EIP	EIP awards made with effect from 1 April 2022 are equivalent to a maximum of 150% of base salary for both executive directors for the short-term element and 150% of base salary for the long-term element, with the long-term element potentially vesting in equal instalments in years three, four and five subject to further performance conditions. Further information on the performance conditions is shown earlier in this section.

Non-executive directors

The Board undertook its annual review of fees for the independent non-executive directors in March 2022, taking into account that the last increase in independent non-executive director fees was in 2018. Since then, increases for the wider workforce have been made of 3% in 2019, 2% in 2020, 3% in 2021 and 3% in 2022. Applying the same rates to the base fee for independent non-executive directors would mean that the base fee for 2023 would be £55,729.

A benchmarking exercise was undertaken using data from two different independent sources. These indicated that the base fee for the independent non-executive directors was significantly lower than the median market rate. The combination of these factors, along with the significant demands placed on the independent non-executive directors in their roles on the Board, meant that it was agreed that the base fee would increase from £50,000 to £58,000 for 2023 and that the additional fees for the role of Committee Chair and Senior Independent Director would be increased from £10,000 to £12,000 to further align with the market median.

The benchmarking data indicated that the fee for the role of Chair should be increased in line with the rest of the workforce at 3%, therefore the Chair fee has been increased from £275,000 to £283,250 with effect from 1 April 2022. The independent non-executive fees will next be subject to an annual review in March 2023. The fees to be paid in 2023 are set out below:

	£'000
Chair fee	283
Base independent non-executive director fee	58
Additional fee for Committee Chair¹	12
Additional fee for Senior Independent Director	12

¹ The additional fee for the role of Committee Chair is not paid to the Chair for her role as Nomination Committee Chair. The fee paid to Vanda as Chair already encompasses her additional role as Committee Chair.

People and Remuneration Committee

The membership and attendance at Committee meetings during the year is shown in the table in *Leadership* within the Governance section. Meetings are also attended by the CEO, the Chief People Officer, the Head of Reward and the Company Secretary. No colleagues are present when their own reward is discussed. The People and Remuneration Committee is a sub-committee of the Board and has four scheduled meetings a year. Additional meetings are held as and when required. The specific matters considered by the Committee at each of the meetings are shown in the table below:

Meeting	Matters considered
May 2021	<ul style="list-style-type: none"> • Update on the performance in relation to the LTIP for 2018–2021 and the short-term element of the EIP for 2021. • A review of the measures for the EIP award in 2021. • An update on the myDeal programme that was underway in the business to seek to align contractual terms and conditions amongst much of the workforce. • The approval of an exceptional bonus for Nevil Muncaster, as set out in the Annual Report in 2021. • Review of the draft Remuneration Report for 2021.
June 2021	<ul style="list-style-type: none"> • Conclusion on the vesting of the LTIP for 2018–2021 and the first year of the EIP for 2020/2021. • Approval of the long-term performance measures for the EIP scheme awarded in 2021 for the elements due to vest in 2023 to 2025. • Discussion of the remuneration arrangements for the departure of Nevil Muncaster from the business, should he decide to accept the offer of employment he had received from elsewhere. • Approval of the measures for the EIP award in 2021 and the continued structure of the EIP scheme with a threshold payment level of 20% and a target payment level of 80%.
November 2021	<ul style="list-style-type: none"> • Update on the Learning Academy that was in the process of being set-up within the business. • An update on the changes proposed to the approach to performance management within the business. • An update on the approach to equality, diversity and inclusion across the business. • Approval of a revised Security of Employment Policy to apply to colleagues joining the business on or after 1 May 2021.
January 2022	<ul style="list-style-type: none"> • An update on the remuneration market from Willis Towers Watson. • An update on the performance of the variable pay schemes due to vest in 2022; the LTIP for 2019–2022 and the short-term element of the EIP for 2022. • A review of pension contributions made for Band 1 colleagues and approval of the proposed approach to align this further with the rest of the workforce. • Approval of the remuneration to be offered to the Director of Strategy and Regulation.

Meeting	Matters considered
March 2022	<ul style="list-style-type: none"> • Review and approval of the pay awards for executive directors and senior management, effective from 1 April 2022. • Update on the performance in relation to the LTIP for 2019–2022 and the EIP short-term element for 2022. • Initial discussions of the performance measures for the 2022 award of the EIP, with particular focus on a letter received from Ofwat in relation to executive remuneration and the need to ensure a clear connection being environmental performance and variable pay. • A discussion around the remuneration arrangements that would apply should there be a change of CEO, due to discussions that were ongoing with Liz Barber around her wish to retire from the business.

During the year under review, the committee received remuneration advice from Willis Towers Watson. Willis Towers Watson received fees of £32,640 for their update on the remuneration market and benchmarking data in relation to executive director and senior management roles. Willis Towers Watson also provide insurance broking services to Yorkshire Water, but the Committee believes that this does not compromise their independence from the business. Willis Towers Watson are signatories to the Remuneration Consultants Group Code of Conduct and any advice received from them is governed by that Code. The Committee has reviewed the way in which Willis Towers Watson operate and their relationships with the business and is satisfied that the advice it receives is independent and objective.

During the year an externally-facilitated evaluation was undertaken of the Board and all of its committees. The feedback on the People and Remuneration Committee showed it to be operating very effectively with time used well in meetings and good transparency of information to Committee members. There were some areas identified for specific additional focus in the coming year, including more information on some specific people matters, a deep dive on diversity across the organisation and a review of the EIP measures for 2022/2023 to ensure that these align with the desired culture and behaviours of the organisation.

In accordance with its terms of reference, the Committee is responsible for:

- Setting the remuneration policy for all executive directors and YWLT members, considering relevant legal and statutory requirements, the UK Corporate Governance Code and associated guidance, having regard to pay and employment conditions across the company;
- Considering the clarity, simplicity, risk, predictability, proportionality and alignment to purpose, values, strategy and culture of the remuneration policy;
- Reviewing the design of all long-term incentive plans for approval by the Board;
- Considering succession planning for directors and other senior executives, taking into account the challenges and opportunities facing the company, the skills and expertise needed in the future and the need for the development of a diverse group of colleagues for succession;
- Overseeing any remuneration paid to leavers from amongst the executive directors and YWLT members, and consideration of the reasons for departure by any senior employee;
- Appointing remuneration consultants to provide reports, surveys or information deemed necessary to assist with the setting of an appropriate remuneration policy;
- Considering reports on diversity and inclusion across the business and overseeing any actions required in these areas and the initiatives in place to promote a diverse and inclusive workforce at every level of the organisation;
- Receiving reports on the performance and development of the executive directors and YWLT members; and
- Considering the culture of the organisation and whether this aligns to the desired culture set by the Board.

Copies of the Terms of Reference are available from the Company Secretary or on our website,

Consideration of shareholders' views

The presence of three directors representing shareholders on the Board of Yorkshire Water enables a direct flow of communication and sharing of views by shareholders to the Board. All three investor directors also sit on the People and Remuneration Committee.

Outside appointments

Liz Barber became a Non-Executive Director of Cranswick plc on 1 May 2021 and received fees of £49,000, which she was entitled to retain.

Signed by order of the Board

A handwritten signature in black ink, appearing to read 'Kathy Smith', written over a light blue horizontal line.

Kathy Smith
Company Secretary
15 July 2022

Long-term viability statement

We publish our long-term viability statement in our Annual Reports and Financial Statements (ARFS) on page 74 and this is published simultaneously with this Annual Performance Report. Information on how we identify and manage our risks is also included in our ARFS on page 68. [Click here to view our ARFS on our reports webpage:](#)



7. Transactions with associates and the non-appointed business

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Loans by or to the appointee

The following points detail Yorkshire Water's transactions with associated companies and its non-appointed business.

Loans between Yorkshire Water and its subsidiaries

The following wholly owned subsidiary companies have on-lent to Yorkshire Water sums raised from the issue of corporate debt. They are both registered in England and Wales and have their registered office at Western House, Halifax Road, Bradford BD6 2SZ:

1. Yorkshire Water Finance plc (YWF)

YWF is a public limited company (registered number 11444372).

As part of a re-organisation that took place in the 2018/2019 financial year, YWF was substituted as the issuer on approximately £3 billion of listed bonds and private notes that had been originally issued by Cayman Island incorporated companies (being Yorkshire Water Services Odsal Finance Limited and Yorkshire Water Services Bradford Finance Limited respectively – both of which have now been liquidated).

It is intended that YWF will conduct all future public bond financings that will be on-lent to (and guaranteed by) Yorkshire Water. Finance raised will fund, amongst other things, Yorkshire Water's extensive regulated capital programme and ongoing operating expenditure.

2. Yorkshire Water Services Finance Limited (YWSF)

YWSF is a private company incorporated with limited liability (registered number 04636719).

YWSF is the issuer of legacy bonds that have been on-lent to (and guaranteed by) Yorkshire Water. However, YWSF has not issued any bonds since 2007/2008 and will not issue any bonds in the future, as all new bonds will be issued by YWF.

As at 31 March 2022 Yorkshire Water has guaranteed the following bonds and private notes issued by its subsidiaries:

	Nominal £m	Coupon %	Maturity Date Year	Liability at 31 March 2022 £m
Fixed Rate				
Yorkshire Water Services Finance Limited	7.400	5.500	2027	6.887
Yorkshire Water Services Finance Limited	200.000	5.500	2037	195.985
Yorkshire Water Finance plc	210.700	6.588	2023	210.616
Yorkshire Water Finance plc	94.300	3.870	2023	114.143
Yorkshire Water Finance plc	33.800	5.875	2033	29.325
Yorkshire Water Finance plc	18.800	3.870	2024	22.814
Yorkshire Water Finance plc	300.000	1.750	2026	298.803
Yorkshire Water Finance plc	135.500	6.454	2027	135.376
Yorkshire Water Finance plc	60.000	2.030	2028	59.826
Yorkshire Water Finance plc	250.000	3.625	2029	245.460
Yorkshire Water Finance plc	90.000	3.540	2029	94.129
Yorkshire Water Finance plc	255.000	6.601	2031	254.765
Yorkshire Water Finance plc	50.000	2.140	2031	49.829
Yorkshire Water Finance plc	350.000	1.750	2032	344.651
Yorkshire Water Finance plc	90.000	4.965	2033	96.809
Yorkshire Water Finance plc	50.000	2.210	2033	49.817
Yorkshire Water Finance plc	40.000	2.300	2036	39.843
Yorkshire Water Finance plc	50.000	2.300	2036	49.803
Yorkshire Water Finance plc	300.000	6.375	2039	302.310
Yorkshire Water Finance plc	450.000	2.750	2041	444.920
Yorkshire Water Finance plc ¹	200.000	3.750	2046	198.173
Total fixed rate				3,244.284
Yorkshire Water Services Finance Limited	65.000	1.823	2050	100.527
Yorkshire Water Services Finance Limited	125.000	1.462	2051	198.733
Yorkshire Water Services Finance Limited	85.000	1.758	2054	131.642
Yorkshire Water Services Finance Limited	125.000	1.460	2056	198.674
Yorkshire Water Services Finance Limited	100.000	1.709	2058	154.623
Yorkshire Water Finance plc	127.800	3.307	2033	180.661
Yorkshire Water Finance plc	260.000	2.718	2039	397.210
Yorkshire Water Finance plc	50.000	2.160	2041	66.532
Yorkshire Water Finance plc	50.000	1.803	2042	65.790
Total inflation linked				1,494.392

¹ YWF has signed a deed poll, which is an enforceable and legally binding pledge, to exercise its optional redemption right prior on the end of the fixed rate period of this bond (22 March 2023).

Loans between Yorkshire Water and its parent companies

Loans between Yorkshire Water and its parent companies are as follows:

1. Loan 1 from Yorkshire Water to Kelda Eurobond Co Limited. A long-term loan was made by Yorkshire Water during 2008/2009 to reflect the market value of certain inflation linked swaps that were novated to Yorkshire Water at that point in time. During the year ended 31 March 2015 a legal entity reduction exercise removed a number of surplus companies within the Kelda Group that included the removal of Kelda Holdco Limited. As a result, the counterparty for this loan was moved from Kelda Holdco Limited to Kelda Eurobond Co Limited on the same terms as the original loan.
2. Loan 2 from Yorkshire Water to Kelda Eurobond Co Limited. A long-term loan was made by Yorkshire Water to Kelda Holdco Limited during 2009/2010 to enable the refinancing of acquisition debt held by Kelda Holdco Limited at that time. During the year ended 31 March 2015 a legal entity reduction exercise removed a number of surplus companies within the Kelda Group that included the removal of Kelda Holdco Limited. As a result, the counterparty for this loan was moved from Kelda Holdco Limited to Kelda Eurobond Co Limited on the same terms as the original loan.

As at 31 March 2022 the balance outstanding on this loan was **£199.2m (2021: £207.3m)**. The outstanding amount has reduced during the financial year due to the annual repayment of **£8.1m** of principal of the loan. Interest on this loan is payable at market rates.

As at 31 March 2022 the balance outstanding on this loan was **£742.1m (2021: £742.1m)**.

Dividends paid to any associated company

Intra-group dividends of £52.6m were paid in the year (2021: £45.2m), broken down as follows:

	2022 £'m	2021 £'m
Dividends used to make inter-company interest payments	37.5	43.2
Dividends used by Kelda Group to pay head office costs and Kelda Finance group interest and fees	15.1	2.0
Total	52.6	45.2

The dividend policy is to:

- Determine a base dividend from a set yield applied to regulatory equity derived by reference to the company's actual capital structure. This base dividend is assumed to grow annually in real terms and with CPIH during AMP7, which recognises the management of economic risks and capital employed;
- Adjust the base dividend to reflect and recognise in-the-round company performance and benefit sharing from service and efficiency performance particularly performance against relevant targets set in the determination of price limits; the continuing need for investment of profits in the business and the funding of employee interests;
- Consistently calculate dividends in accordance with the policy for any dividend payments made in AMP7 and to ensure they are justified in relation to the factors outlined above; and
- Ensure there are sufficient profits available for distribution in the foreseeable future and the company remains financially resilient, following the payment of a dividend, when considering the undertakings and financial covenants that are part of Yorkshire Water's financing arrangements.

When approving dividends to be paid in a financial year, the Board assesses both company performance to date and that expected for the whole of an AMP to determine the total dividends that could be paid for the whole AMP.

As such dividend payments are considered within the longer-term context of the business and not just on the basis on the last 12 months and explicitly considers the ability of the business to be able to deliver into the future given the proposed dividend.

For the 2022 financial year the Board considered a number of factors prior to approval of dividends including: delivery of PCs that incorporate incentive based rewards and penalties for AMP7, circumstances where performance has not met targets, the ongoing EA and Ofwat investigations into environmental performance where the company remains actively engaged with these regulators to resolve any remaining issues, and the ability to maintain financial resilience through the remainder of AMP7 in line with the review of long-term viability.

Dividends of £52.6m were paid in the year (2021: £45.2m): none of which were available to the shareholders of Kelda Holdings Limited (2021: nil), Yorkshire Water's ultimate parent company, as they have continued to support the company's financial resilience since AMP6.

These dividends included distributions of £29.4m (2021: £35.1m) that did not impact the company's liquidity position or its distributable reserves as they were returned immediately to the company in the form of interest receipts on intercompany loans. No dividends have been proposed post year end in relation to 2022 (2021: £nil).

Guarantees or other forms of security by the appointee

Certain bank accounts held by Yorkshire Water and its subsidiary, YWSF, form a pooling arrangement, whereby the balances on accounts are offset with each other. This facility is subject to provision of a cross guarantee between Yorkshire Water and YWSF whereby each company guarantees the current account liabilities of applicable bank accounts held by the other. This pooling arrangement has a net overdraft limit of £5.0m.

As disclosed above, Yorkshire Water has also guaranteed bonds and private notes issued by its subsidiaries.

Transfer of any corporation tax group losses by or to the appointee

Corporation tax group relief received by regulated business £m	Associate surrendering the group relief	Turnover of the associate £m	A statement of the means by which the payment for the group relief has been established	Value of group relief £m
18.111	Kelda Eurobond Co Limited	nil	Prevailing corporation tax rate	3.441
12.438	Kelda Finance (No2) Limited	nil	Prevailing corporation tax rate	2.363
3.926	Kelda Group Limited	7.924	Prevailing corporation tax rate	0.746
34.475				6.550

Supply of any service by or to the appointee

A significant proportion of the activities identified within retail (household and non-household) are performed by separate companies, Loop and Three Sixty, both of which are UK based companies. All the costs associated with these contracts are charged to Yorkshire Water via an annual contract fee. Yorkshire Water, Loop and Three Sixty companies are wholly owned subsidiaries of Kelda Group Limited.

In April 2016 Yorkshire Water entered into an outsource agreement with Three Sixty. This contract was in preparation of the market opening for non-household (NHH) customers in the following April 2017 and created an arm's length agreement between retail and wholesale. This contract was agreed on a fixed price fee with the value derived from the final determination, it included an element of management fee for Three Sixty. Three Sixty continued to use Loop's customer service function to fulfil Yorkshire Water's requirements and formed a separate contract with Loop to do this.

As part of the group strategy to focus on wholesale and household retail activities the sale of the non-household retail customer base was completed in 2019. As a result of the sale concluding the non-regulated turnover for Three Sixty is now shown as zero.

Yorkshire Water receives supply of services from associates within the Kelda Group. These charges are for corporate functions including teams such as Finance, Internal Audit and transport management.

The below table shows the services received by the regulated company in accordance with the threshold of 0.5% appointed turnover or greater than £100k.

Services received by regulated business	Associate Company (providing service)	Turnover of the associate £m	Terms of supply	Value of service received by regulated business £m
Corporate charges	Kelda Group Limited	7.924	Cost allocation	7.286
Customer services (HH)	Loop Customer Management Limited	29.810	Cost allocation	27.203
Property services	Keyland	5.479	Cost allocation	0.000
Transport Management	KTML	1.710	Management charge	1.710

Yorkshire Water also charges Kelda Group/ associates for any support service function activity this includes functions such as IT, facilities, and other various common services within the Group. The cost and revenues associated with this is allocated to non-appointed and follows RAG 5 guidelines.

The strategic decision by the company's parent company to seek of disposal of non-regulated businesses, with most of the companies sold in previous reporting years (2017/2018 and 2018/2019).

The table below shows these recharges.

Services received by regulated business	Associate Company (providing service)	Turnover of the associate £m	Terms of supply	Value of service received by regulated business £m
	Kelda Group Limited	7.924	Cost allocation	0.955
	Loop Customer Management Limited	29.810	Cost allocation	1.266
Business support services	Three Sixty Water Limited	0.000	Cost allocation	0.346

Omission by the appointee or any associated company to exercise a right as a result of which the value of the net assets of the appointee is decreased

We have nothing to report against this for 2021/2022.

Waiver of any consideration, remuneration or other payment by the appointee

We have nothing to report against this for 2021/2022.

Transfer of any asset or liability by or to the appointee

We have nothing to report against this for 2021/2022.

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