

# Annual Performance Report 2020/2021

Originally published July 2021

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published January 2022



YorkshireWater

# Navigating this document

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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:



An example for outcome delivery incentives is shown below:

## Outcome Delivery Incentives (ODIs)

ODIs is a collective term for the financial incentives – positive and negative – that Ofwat has applied to the delivery of our five-year plan. 'Rewards' allow us to charge more over the next five years, while 'Penalties' require us to charge less. Some of these ODIs measure performance in each of the five years of our current plan, while others apply only to the whole five years.

# Welcome to our 2020/2021 Annual Performance Report

**This is our first Annual Performance Report for asset management period (AMP) 7 and it covers the period from April 2020 to March 2021. 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 2020/2021 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](mailto: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



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**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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| <b>1</b>  | <b>Introduction</b>   | <b>09</b>  |
| This section includes a foreword and links to useful publications and websites and an introduction to what we do here at Yorkshire Water.   |   |            |
| <b>2</b>  | <b>Statements from our Board</b>                              | <b>21</b>  |
| In this section you can find a Board statement on accuracy and completeness of data and information and the Board statement on our company direction and performance.   |   |            |
| <b>3</b>  | <b>How we're progressing with our performance commitments</b> | <b>33</b>  |
| In this section, we explain what our performance commitments are, how we are performing against them and 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. |   |            |
| <b>4</b>  | <b>Pro forma tables</b>                                       | <b>144</b> |
| This section includes the information that we must report to our economic regulator, Ofwat. Information is shown in tables with supporting commentary. This section includes a statement from our financial auditor, Deloitte and our technical auditor, Atkins.      |   |            |
| <b>5</b>  | <b>Meeting our licence conditions</b>                         | <b>321</b> |
| In this section we confirm our compliance with the licence conditions relevant for the annual performance report such as the ring-fencing certificate.  |   |            |

## **6 Board, leadership, transparency and governance 327**

In this section we include information on our company structure and how we are governed. We also include disclosures such as the statement on executive pay and performance.

## **7 Transactions with associates and the non-appointed business 378**

In this section we disclose all the transactions between us and our associated companies.

# 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.



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# Foreword

## Welcome to our 2020/2021 Annual Performance Report This is our sixth Annual Performance Report and it covers the period from April 2020 to March 2021.

This is the first Annual Performance Report for Asset Management Period (AMP) 7. 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.

A new AMP means that there are lots of changes. Our performance commitments are ways in which we measure and report our performance. For AMP7, we have 44 performance commitments, which is 18 more than the previous AMP. 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 in year one of AMP7, especially when we think about the impact that COVID-19 has had on us all.

## COVID –19

Our response to COVID-19 was driven by two simple priorities: protecting our customers and protecting our colleagues. Our core service delivery was quickly adapted, with visits into customer properties suspended for all but the most urgent reasons. The introduction of new safe working practices meant that we were able to maintain all essential work on our networks, to keep water flowing and toilets flushing at all times.

Our financial support to customers facing difficulty with their bills was promoted widely, and we offered flexible payment terms and delayed payments where necessary. Interruptions to supply have a bigger impact on people whose lifestyles are impacted by lockdown, and we've received more customer contact during incidents for understandable reasons.

## Redetermination of the PR19 settlement

In February 2020, we took the decision not to accept Ofwat's Final Determination (FD) in the PR19 (our Price Review submission to Ofwat for the 2020–2025 period) process and to ask the economic regulator to refer the matter to the CMA for a redetermination.

We took this decision on the basis of analysis which showed that the PR19 determination did not allow sufficient revenue to provide a resilient service to customers now and into the future. The redetermination process was an extremely thorough exercise and the CMA's FD represented an increase in allowed revenues of £148m (2017/2018 prices), which includes the impact of a 0.2% increase to the allowed return, this will be recovered in the final three years of AMP7. As a result, we will be able to invest more in reducing leakage and our innovative public private partnership in Hull, Living with Water will also benefit.

We are now looking forward to the next Price Review process and will work collaboratively with our regulator, to help ensure that process increases resilience, meets the challenge of climate change, and helps recovery from the pandemic.

## Re-thinking our purpose, how we deliver public value and our future strategy

The experience of the last year, and our continued development of regional collaborative arrangements, has made it timely to re-think our purpose and how we deliver public value over and above the provision of our core services. At the same time, as we start to plan for our next Price Review, we are undertaking a review of our strategy. Our purpose, public value and strategy need to be properly aligned and we will be consulting widely with colleagues, customers and stakeholders before launching all three in a single document in September 2021.

We hope that you 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](#).

# 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.



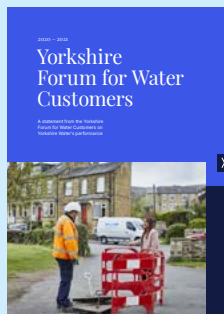
## Risk & Compliance Statement

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 Annual Performance Report. We have written our performance summary in collaboration with our customers and the Yorkshire Forum for Water Customers.



## 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.



## Final Assurance Plan

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

# 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. Here 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 during their ongoing customer consultation. 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 all in one place 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 have assessed how well water companies are delivering in a number of areas that matter the most to customers. Each area has been assessed and graded and we have been ranked fourth at the time of this publication. You can see the results on the link below.

# 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.**



# Our vision

To put people at the heart of everything we do

## Our behaviours



### We own it

Every one of us gets what needs to be done and sees it through to the end



### We're better together

By bringing people together we can do amazing things



### We're always learning

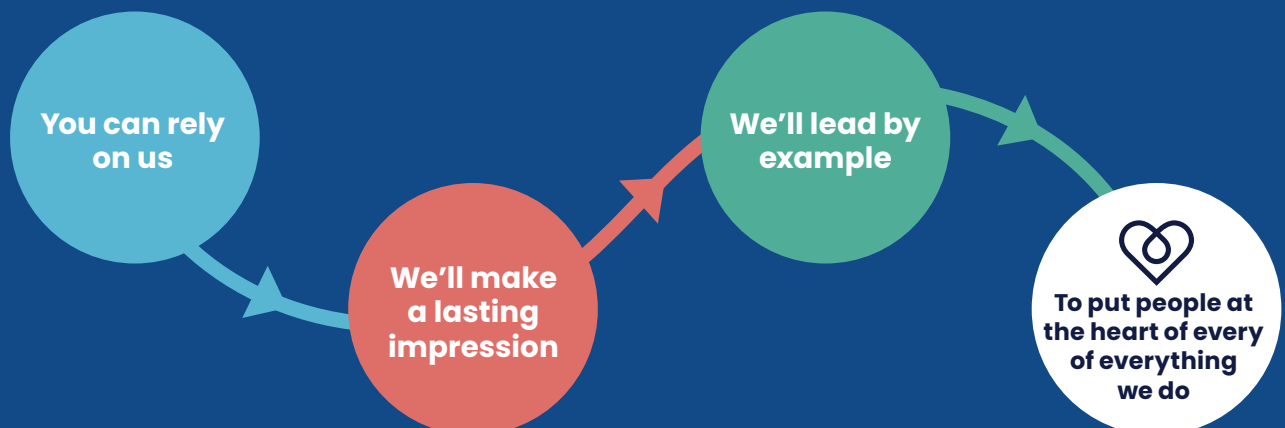
We're not afraid to try things out, challenge ourselves and others and to share our learning and experiences



### We have heart

We're a Yorkshire company with that true Yorkshire spirit

## Our promise



# What we do



**We provide water and wastewater services to the people of Yorkshire. 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 31,600 km of pipes.

We collect and treat about 1 billion litres of wastewater from homes and businesses (and rainwater that goes into the 52,315 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.

# What we do

We provide essential water and wastewater services to the people and businesses of the Yorkshire and Humberside region, playing a key role in the region's health, wellbeing and prosperity.



Collecting, treating and supplying around **1.3bn litres** of water every day.



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



**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 **1bn litres** of water every day.



Recycling nutrients and generating energy from leftover human waste.



All maintained by around **3,700 employees**, using a fleet of over **2,000 vehicles** and increasingly complex technology, delivering for today and planning for the long-term.

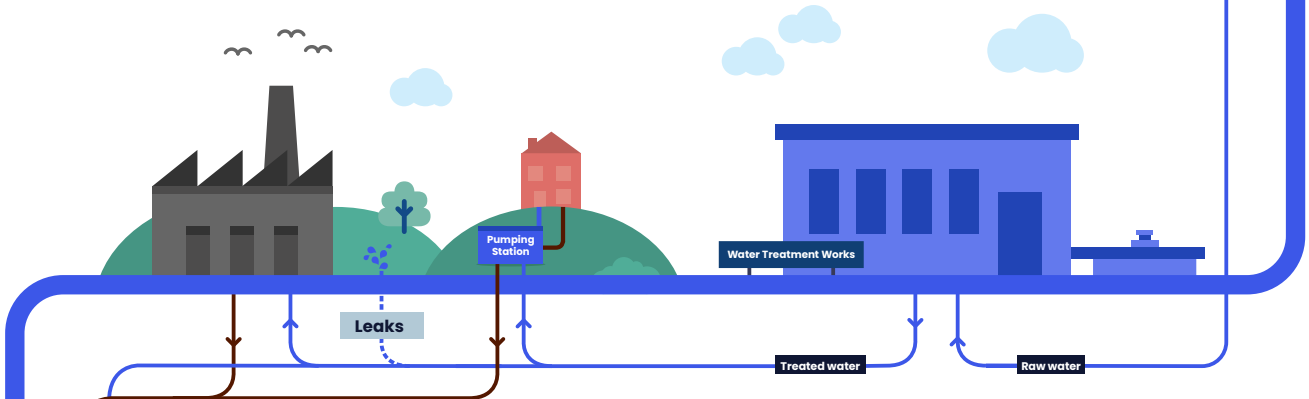
**Find out more about what we do here:**

**We're one of Yorkshire's biggest land owners**

**We collect water from three main sources**

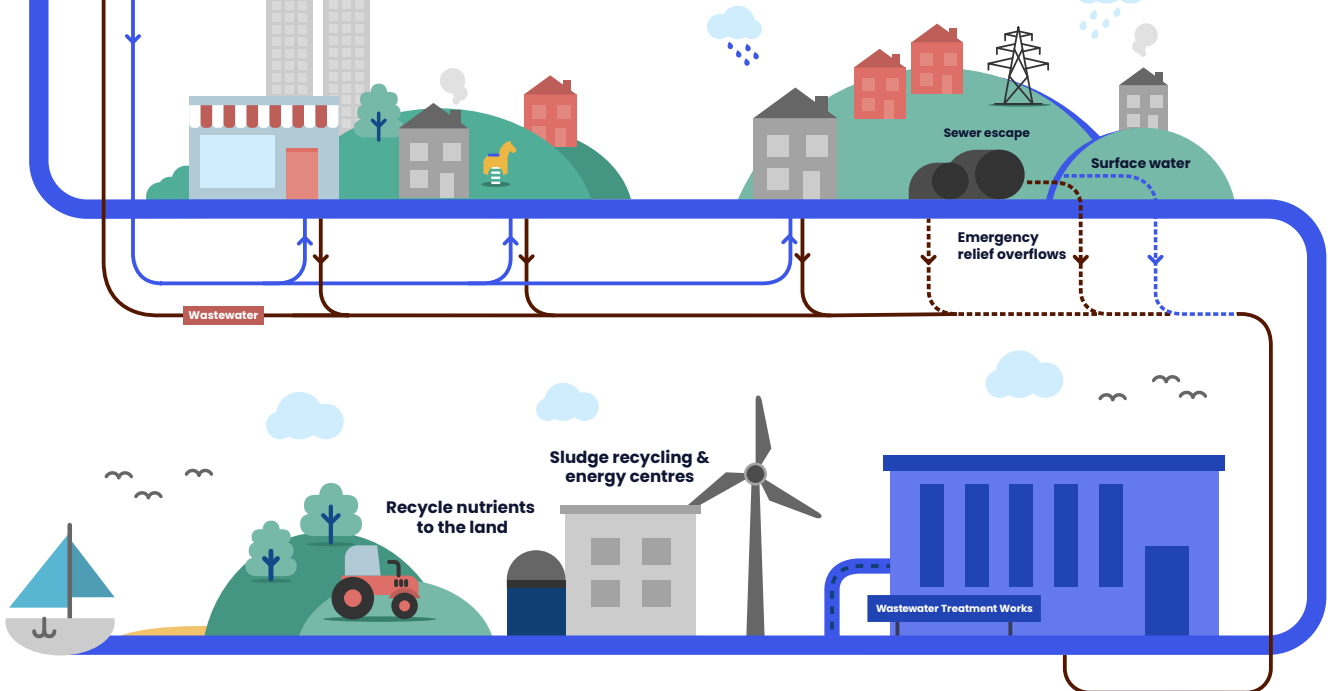


**We manage over 650 water and wastewater treatment works**



**We supply water to homes and businesses across the county**

**Our customer service team support our five million customers**



**We safely return water back into the environment**

**We collect one 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. Assurance is vital to ensure that the data and information published is accurate and complete.

This statement is being made by the Yorkshire Water Board to confirm the information that is provided through our regulatory reporting for the year 2020/2021 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, complete and accessible for different customers and stakeholders.

## Our assurance framework

The Yorkshire Water Board has continued to review the effectiveness of assurance approaches for regulatory reporting throughout Asset Management Period 6 (AMP6). This has delivered improvements over that period and helped identify further opportunities for improvement with the move into AMP7.

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 throughout the year 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. Throughout this year we have aligned our assurance activities. This has allowed us to learn from each one, and apply this knowledge, when applicable, to other assurance activities.

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



## Our risk-based approach

The approach to assuring data in AMP7 must be reflective of the risks involved and needs to consider the scale of reporting requirements. Our assurance approach is risk based (this means that we place more focus in areas that are higher risk). With the move into AMP7, the Board has reviewed and improved the risk-based approach that is in place for regulatory reporting.

It is essential that the assurance programme is responsive to the assessed risk. 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 deep dive process audits into the areas of higher risk have been implemented. These deep dive process audits 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 deep dive 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 2020/2021

**To satisfy ourselves that our published information is accurate, complete and accessible, all elements of our 2020/2021 regulatory reporting are subject to an appropriate assurance process. In particular:**

- Our assurance processes for annual performance reporting are certified to the British Standard ISO9001:2015 Quality Management System. This is best practice and externally verified.
- 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.
- 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 customer's feedback, to ensure we meet our ambitions for a document that is accessible for all customers.
- The Board has utilised specific individual Directors to support the activities required in this area. The Chief Financial Officer and the Chief Regulation and Strategy Officer 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.
- The Board uses the Audit and Risk Committee to support activities in this area. This Committee takes an active role in engaging with and challenging the assurance approaches in place. It has reviewed the new assurance framework for AMP7, reviewed the external assurance provision and approved the procurement of these activities, has reviewed the assurance approach for 2020/2021 specifically and has reviewed and challenged the outputs from the assurance processes completed.
- The outputs from our 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, attended the Audit and Risk Committee to independently report on their findings.

## Exceptions and Weaknesses

The Board has taken action to ensure that any exceptions and weaknesses in the assurance approach have been addressed. As detailed above, the Audit and Risk Committee have been involved in the development and continued challenge of the assurance approach. The key assurance findings from the APR 2020/2021 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.

## 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. The Board has read the report, reviewed the content and owns the information that is presented. The Board has obtained comfort from the Audit and Risk Committee that there are appropriate controls and assurance processes in place regarding the information contained within the report.

The Board is satisfied that the approaches have appropriately identified and addressed any risks to 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 September 2020 and March 2021. 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 7 July 2021. 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 Chief Strategy and Regulation Officer 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 7 July 2021, 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. At the Board meeting on 7 July 2021, 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 2020/2021
- 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.

The redetermination of our PR19 settlement by the Competition and Markets Authority (CMA) concluded in February 2021. The CMA's approach to the redetermination was conducted with scrupulous fairness and the final decision was balanced and well-reasoned. This year we have begun delivering and reporting on our AMP7 which 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 first year of our delivery against our new 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, Chris Johns was appointed to the Board with effect from 1 June 2020 as our new CFO. During the year Anthony Rabin, our Chair, announced that he would retire as he approached nine years with the business, which is the limit set by the UK Corporate Governance Code for him to be considered independent. We have undertaken a robust and comprehensive recruitment process to seek a new Chair to succeed him. We have now appointed Vanda Murray OBE to our Board from 1 July as a Non-Executive Director and Chair designate. She will take up the role of Chair later this year, following a handover.

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 three 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 which have shaped both the strategy review process and the evolving strategic direction.

The Board had six scheduled Board meetings in 2020/2021, with one additional ad-hoc meeting held to approve a major procurement contract. All of the Board meetings in the year have been held remotely by video conference due to the restrictions imposed as a result of COVID-19. 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, an update on our governance approach, and a summary on 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 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 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 2019/2020, the Board created a Colleague Engagement Forum, which has met six times this year. The Forum is made up of colleagues from across the business, representing all areas of the organisation, and allows the Board to understand the culture of the business directly, from day-to-day experiences. This enables the Board to gauge whether our vision and values are appropriately embedded.

There is also a colleague engagement survey twice a year which seeks to understand the views of colleagues across multiple topics. Our survey in late-2020 led to over 32,000 comments being received from 3,303 responses. These were summarised and 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 capital. Our decision-making is improved by considering the positive and negative effects and links between all Six Capitals. This means that our decisions are balanced and take account of risk and value, and deliver fully informed long-term approaches.

Our latest assessment of our delivery to our stakeholders has been published in a report called 'Our Contribution to Yorkshire' and reviews the period from 2015 to 2020. This is our second 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 report is available at

In addition to our Six Capital 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. This is completed biannually to inform the company's Annual Report and Financial Statement (ARFS) and the company's annual strategic review. 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, for information, and are used to inform activities such as our Board's annual strategic 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 2020/2021, 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. 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 the launch of our new customer promise and brand, design work for key customer journeys (or how customers experience the services we provide), enhanced digital services with the launch of a new website, and improved self-serve options. We have focused on supporting customers through the pandemic and understanding how this has impacted our customer's needs.

As we look ahead to Year 2 of AMP7, our focus will be on delivering our new improved customer journeys and embedding our customer promise through ongoing training and development.

We have a Board committee with a focus on the social purpose and public accountability of the organisation. We call this the Social 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 Social 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.



## 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 [Public Interest Commitments](#)

The rapid onset of the COVID-19 pandemic in 2020/2021 meant that we made major and rapid changes to the company's operations to ensure that we could continue to provide an essential service whilst protecting the health and safety of our colleagues and customers.

## How we have performed in 2020/2021

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. In the course of the year, we have responded to the COVID-19 pandemic and worked with continued climate volatility.

Weather conditions throughout 2020/2021 have yet again been challenging. There was a significant period of dry weather in the summer of 2020, and the winter weather conditions in 2021 were challenging due to several very cold snaps in January and February which impacted operational activities for a prolonged period. These events added significant cost pressures in the year. The dry weather in summer 2020 brought higher water distribution and abstraction costs, whereas the weather conditions in winter 2020 led to increased costs in leakage detection and mains repair to maintain service to customers.

Our response to COVID-19 was driven by two simple priorities: protecting our customers and protecting our colleagues. Our core service delivery was quickly adapted, with visits into customer properties suspended for all but the most urgent reasons. The introduction of new safe working practices meant that we were able to maintain all essential work on the networks, keeping water flowing and toilets flushing at all times. Our partnership with our trades unions was vital throughout this period and they played a crucial role in helping us to adapt and support their members.

We adapted to the closure of our offices quickly, having previously trialled mass home working and improved our IT infrastructure. Mindful that not all our colleagues had a home environment suitable for working, we kept safe office space available for those whose personal circumstances made this a necessity.

Our focus on mental health, established well before the pandemic, has meant that we have been able to support colleagues through a very stressful period. Mental health has accounted for nearly half the referrals to our occupational health professionals, a significant increase on pre-pandemic levels. We have 1,700 trained mental health first aiders at Yorkshire Water, and as it can be more challenging to spot symptoms of stress or anxiety, without face-to-face contact, we've provided additional coaching to adapt to these new circumstances.

Our financial support to customers facing difficulty with their bills was promoted widely and we offered flexible payment terms and delayed payments where necessary. Our customers have contacted us more during the last year partly because people working at home used more water which fed through to higher bills for metered customers. Interruptions to supply have a bigger impact on people whose lifestyles are impacted by lockdown and we've received more customer contact during incidents for understandable reasons.

Throughout the changes in levels of lockdown we have experienced through the pandemic, we have largely maintained the processes established in the early months. We have not sought to bring colleagues back into the office prematurely, as our people told us that consistency was important, and they didn't want to be brought back in only to have to revert to home working again shortly afterwards.

In terms of financial impact, domestic consumption has increased due to home working and lockdown, although this has been partially offset by a decrease in non-household consumption caused by business shutdowns. Our costs have increased, and we have incurred exceptional costs of £11.7m in 2020/2021. Cost drivers have included personal protective equipment (PPE), increased contractor costs and rental costs for additional vehicles to maintain social distancing.

Our shared values have come to the fore during COVID-19. We've shared PPE stocks with the NHS at critical points of shortage, we've worked alongside local authorities to deliver services to the public and we have been invited to play our part in the planning of Yorkshire's economic and social recovery.

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 29 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 [www.comparewater.co.uk](#) to find the latest information on water quality, environmental performance, customer service and water bills.

Whilst the COVID-19 pandemic has posed many challenges for Yorkshire Water and our partners, in the last year we have still been able to continue to develop partnerships with organisations across the region in order to address key challenges such as climate change, flood resilience and biodiversity loss.

The Living with Water partnership in Hull has recently begun work on a blue-green city masterplan, which will transform the city and help to address flood risk and other challenges. At the same time, the Don catchment flooding partnership has benefitted from the lessons learnt from Living with Water and is progressing quickly having secured support from local authorities, the Environment Agency and the Mayoral Combined Authority.

The Yorkshire Land Network, which brings together landowners covering more than 30% of Yorkshire has continued to develop and now has a number of workstreams underway including work on recreational access to land, biodiversity net gain, data sharing and carbon offsetting.

Alongside our environmental partnerships, we also recognise our role as a key employer for the region. Over the last year, we have continued to play a part in the Leeds Anchor Network and we are currently funding and driving forward a Leeds Anchor Network diversity dashboard, which would make Leeds the first city in the UK to publish workforce diversity data in a common format to allow for comparison against local demographic data. We have also been successful in securing funding for 75 apprentices through the Government's Kickstart programme in partnership with the TUC.

Going forward we will continue to build on our regional partnerships and we will be working closely with our partners as we begin work on our business plan for 2025-2030.

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 7 July 2021 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



**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.





# Targeted assurance findings



**In our Final Assurance Plan, we told you about the performance commitments we had identified that were important for us to focus on. You can read what we set out to achieve in our Final Assurance Plan [here](#):**

**Here's an update on the areas that we focused on over the last year.**

## D-MeX

D-MeX measures the levels of customer service that we deliver to our customers who're considering or undertaking a new development.

We put together a plan which would see phased improvements over the first three years of the AMP. We have invested in our people and our training. Whilst we acknowledge we still need to improve our position in D-MeX, our auditors have noted that the way in which we report is robust and accurate. We're pleased that our plan to improve compliance and the quality of our work is making a difference and we'll continue to implement further improvements.

Our Internal Audit team performed an audit over the transformation plan in place for Developer Services. There were no significant actions resulting from this and overall, this audit provided confidence in the improvements being made in this area.

Now we've built stronger teams, we'll continue our plan to improve our Developer Services activities.

## Mains Repairs

This performance commitment measures how many of our mains we must repair, and how we manage and maintain these assets.

Our mains repair processes have been through extra levels of assurance this year to ensure they are robust and compliant. This has allowed us to improve our services to customers. We're now working with our new system, Triopsis, which has improved the visibility and recording of the work carried out on our assets. This has allowed us to complete better analysis of our repair and maintenance work, and is improving the way we manage these assets.

This measure has been through additional process assurance this year by our external auditors. Our auditors have said our process to record our repair and maintenance work was robust and compliant. There was sufficient assurance taking place in this area, however there's an opportunity to document our processes in more detail to reduce the risk of reporting inconsistently. We've begun to apply the process improvements identified from the external audit.



## Internal Sewer Flooding and External Sewer Flooding

Sewer flooding incidents have a big impact on the lives of our customers, and we understand how unpleasant these events can be. We've reviewed the ways in which our workforce operates to enable them to address sewer flooding incidents more effectively. This has been supported by additional training to identify, classify, and support our customers through sewer flooding events.

This measure has also had extra process assurance this year. We're confident that our processes and assurance are robust, however an opportunity for improvement was identified to strengthen the way we identify all neighbouring properties affected by sewer flooding. We're working to ensure we provide adequate support and training to our teams to improve the accuracy of our reporting on flooded properties.

Our Repeat Reduction Forums have been effective in identifying where we haven't resolved an issue which has reduced repeat flooding events. Combined with the completed projects to improve our data and technology, we've greater oversight to reduce these incidents.

Improvement and investment will continue throughout the Asset Management Period (until 2025) to ensure we improve our performance in this measure.

## Pollution

We know that you're interested in measures which may have an environmental effect, particularly if we don't perform well enough. Through our plans we aim to prevent more pollution incidents and improve our response if they do happen.

We have carried out proactive jetting activities throughout the year to help maintain our sewer network and our staff are trained to make sure that they work to optimum standards. The improvements we've made to our data, to our ways of working and data recording mean we've been more rigorous when assessing pollution events to ensure they're reported more accurately.

We continue to meet with the Environment Agency quarterly to assess our plans, review and understand our performance. This helps us target areas of high risk and understand where we can make improvements for the future.

Though we reported throughout the year that we were off track for this measure, through the aforementioned work, we've now met the required level of performance to pass this performance commitment.

# 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 these areas below, together with our plans for improvement.

## Performance commitment data

Performance Commitment	Improvement identified	Plan
<b>Significant Water Supply Events</b>	There's some ambiguity with the definition of this performance commitment. This represents the risk associated with interpretation of regulatory guidelines.	We've been transparent throughout our submissions and have detailed our interpretation of the guidance for this performance commitment.
<b>Internal and external sewer flooding</b>	Improvements can be made to the consistency applied when identifying neighbouring properties affected by sewer flooding.	We're reviewing the processes associated with our sewer flooding reporting, adding more checking processes, training our staff to ensure consistency, and looking into new ways of collating our data to improve our reporting for the 2022 APR (Annual Performance Report).
<b>Sewer collapses</b>	Atkins identified that we can improve the way in which we evidence our reporting. This includes documenting incidents which have caused a sewer flood.	We're implementing new data checks to ensure that we can evidence the alignment of reporting across these performance commitments.
<b>Integrated catchment management</b>	Though we're reporting a nil return for this performance commitment, Atkins have identified areas in which we can strengthen our processes to make sure we can be confident in our reporting for 2021.	We recognise this is a new methodology and so have taken on board the suggested improvements such as detailing our understanding of the Natural Catchment Operating System and ensuring that our baseline position is clearly defined.
<b>Capital carbon and carbon arising from owned land</b>	Improvements could be made to the land carbon reporting model to give greater confidence in the data being reported.	There's a project in progress with UKWIR (UK Water Industry Research) and the Centre for Food Ecology and Hydrology to update and improve the model. Scheduled to be completed by December 2021. We've continued involvement with its development.



Renewable energy generation	As there were some inaccuracies identified in the recording instruments for this measure, assumptions are made to calculate some of the data for this measure. The assumptions made were conservative and have no material effect on this year's reporting, but it's important we get this right for future years.	We're reviewing the recording instruments to consider the best plan to improve the accuracy of the information that they provide.
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## Additional regulatory information

Data item	Improvement identified	Plan
<b>Length of new mains requisitions and SLPs (Self Lay Providers)</b>	It was identified that we should develop a more robust way of collating the underlying calculations for this data with more evidence of the checks in place. This doesn't have a material effect on this year's reporting, our external assurance providers have rated the data we've submitted 'green.'	We're reviewing the process we use to report the underlying data. We'll put in place a more efficient way of collating this information whilst ensuring that checks on our data aren't missed.
<b>Non-resident population</b>	Improvements could be made to the datasets used to calculate this figure. It was noted that there are other agencies that we could contact to gather additional information for this calculation.	We're investigating new providers for the data included in this dataset to strengthen the number which we calculate for this data set.
<b>Average pumping head</b>	A new methodology has been created to report this number due to an update to our reporting systems. The new methodology has been implemented recently and requires some work to ensure that the validation of the information coming from the new data software is robust. Through their checking, our external assurance providers don't believe that this has a material effect on the data provided. They have rated the data we've submitted as 'green.'	A working group has been assembled to review the assurance that supports the calculation of this number. We'll internally report the data more frequently to ensure confidence in the accuracy of this data.
<b>Number of lead communication pipes</b>	It was identified the underlying data which calculates this dataset contains assumptions which should be updated in line with current information. Improvements should be made to prevent inaccuracy in future reporting.	A data project has started which will review any information we can use to improve the accuracy of our underlying calculations and increase confidence in our reporting.
<b>Sewer Blockages</b>	There was a reduction of the internal checks that took place on this dataset this year. Our external assurance providers didn't find any errors in our data; however, it's recommended that we resume previous checking and strengthen these further for future reporting.	The checks in place over this data are being reviewed to improve the way in which we assure this data. This includes putting in place more efficient checking processes.

<b>Additional volume of storage at CSOs (Combined Sewer Overflows)</b>	We have a new methodology for reporting this data and it was identified that we could make improvements to make this methodology consistent with other similar reporting lines. As this data is a nil return, our external assurance providers acknowledge this has no materiality on our reported data this year.	We're working on this methodology with a cross section of the business to ensure consistency in reporting processes and develop improvements as suggested by our external assurance providers.
<b>Large works classification and number of works in each size band and loads</b>	Areas of improvement have been identified where we can strengthen the underlying data which calculates this measure. This includes non-resident population, which we've also detailed in this improvement plan.	A plan is now in place with the owners of the relevant underlying data to understand the improvements required to make the data adequate for this calculation.
<b>Bio energy &amp; liquors</b>	The methodology for this dataset is evolving in line with new and emerging guidance. This has led to a reliance on modelling and some assumptions to produce this dataset.	We'll continue to develop our processes and review emerging guidance. We endeavour to comply with current and future evolving requirements and create more robust reporting information to increase confidence in this data.
<b>Bio-resources Market Monitoring</b>	Improvements could be made to the way in which we define some of the reporting processes within this measure. Our external assurance providers have confirmed that this has no materiality on this year's reporting and have rated the data submitted as 'green.'	We will clearly define the processes and parameters used to calculate this information.

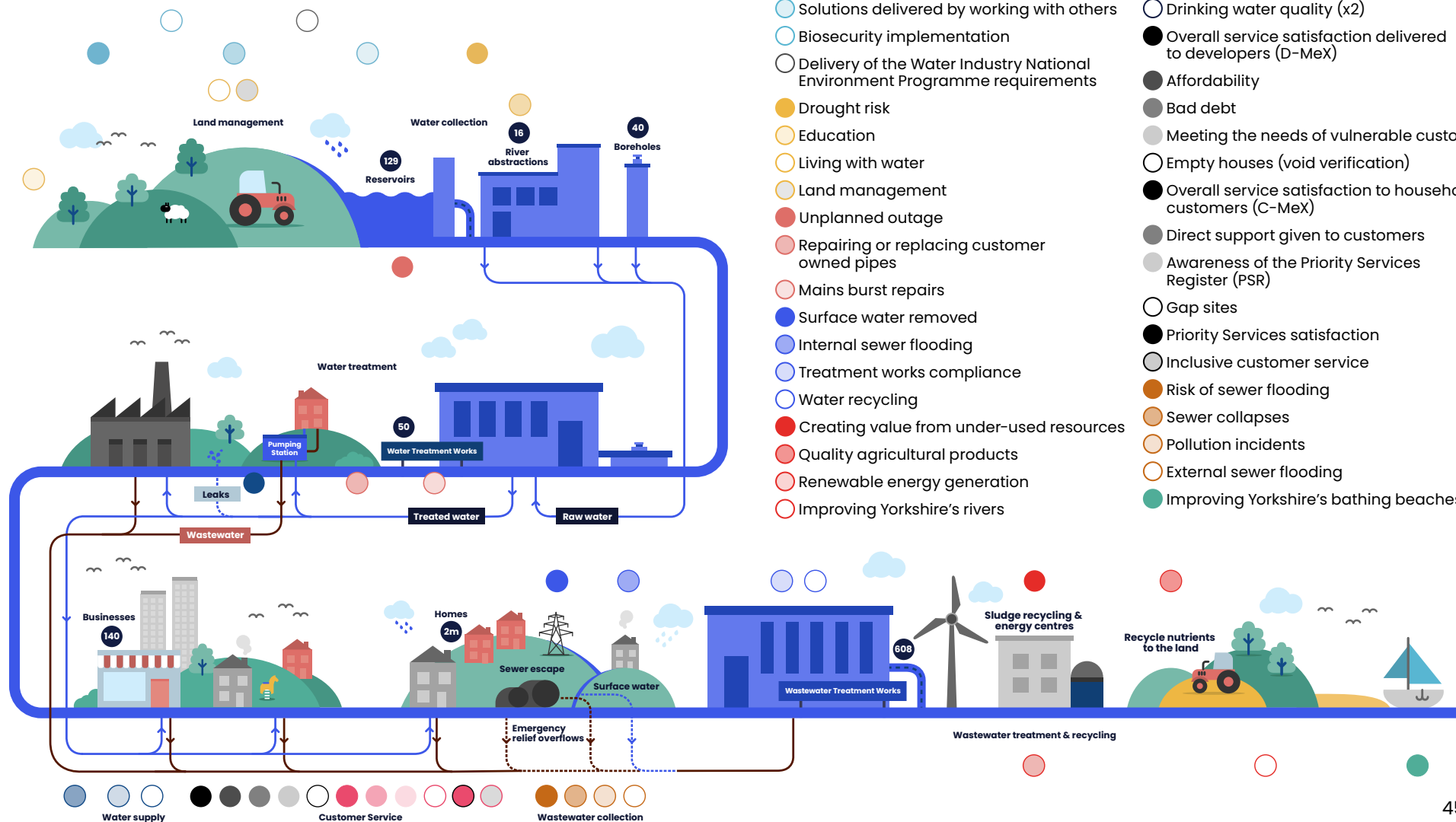
# Introduction to our performance commitments

**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

**To make sure that we deliver our performance commitments, there are penalties when we fail to deliver for you which we'll refer to as 'underperformance', and rewards if we're able to deliver more, which we'll refer to as 'outperformance'. We've designed these incentives to reward performance that beats a particular target and to penalise us if our performance falls short.**

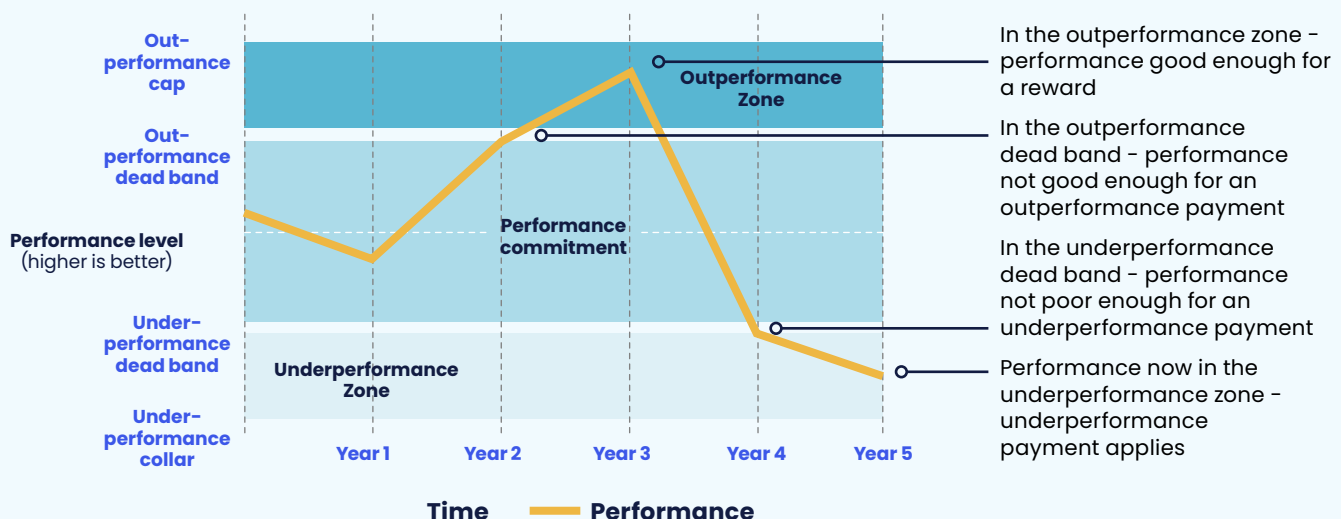
We believe it's important that we focus on delivering these outcomes. As a result, the penalties for underperformance are always greater than the rewards we could earn for outperformance. Not all our performance commitments have financial incentives, some have only reputational incentives based on how we perform against a target that reflects customers' views of us.

Although performance commitments with a reputational incentive don't offer a reward or penalty, poor or good performance can affect how we are seen as a company, making them just as important.

## So, how does it work?

For performance commitments which have a financial incentive, if we outperform (beat the target), we can earn a financial reward (where the performance moves into the outperformance zone as shown on the diagram below) or receive a financial penalty if we underperform (where the performance moves into the underperformance zone). There's an outperformance cap, which is the maximum outperformance we can achieve in any given year for each performance commitment, and an equivalent limit on underperformance, called a 'collar', which is the most we can be penalised.

There's also an outperformance and underperformance 'dead band'. This acts as a buffer between the target and the outperformance and underperformance zones. This is so that we aren't immediately rewarded or penalised for small moves away from the target, which in some cases can be caused by natural factors, such as the weather.



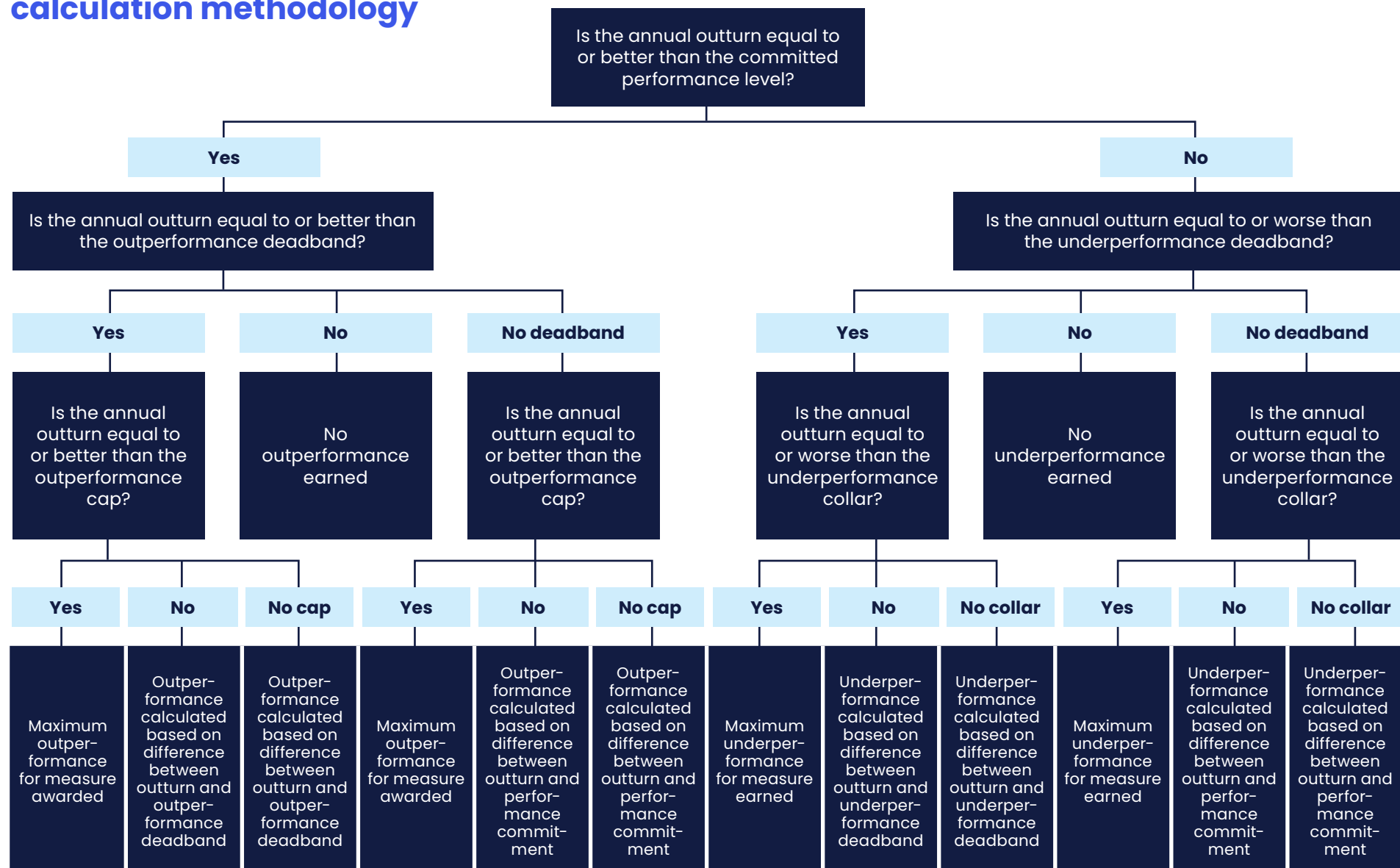
# How do we calculate the outcome delivery incentives?

**We explained earlier how some of our performance commitments carry a financial reward or penalty, also known as outcome delivery incentives or 'ODI'. Here, we'll explain through flow diagrams how they're calculated.**

25 of our performance commitments have ODIs that are taken in-period, annually.

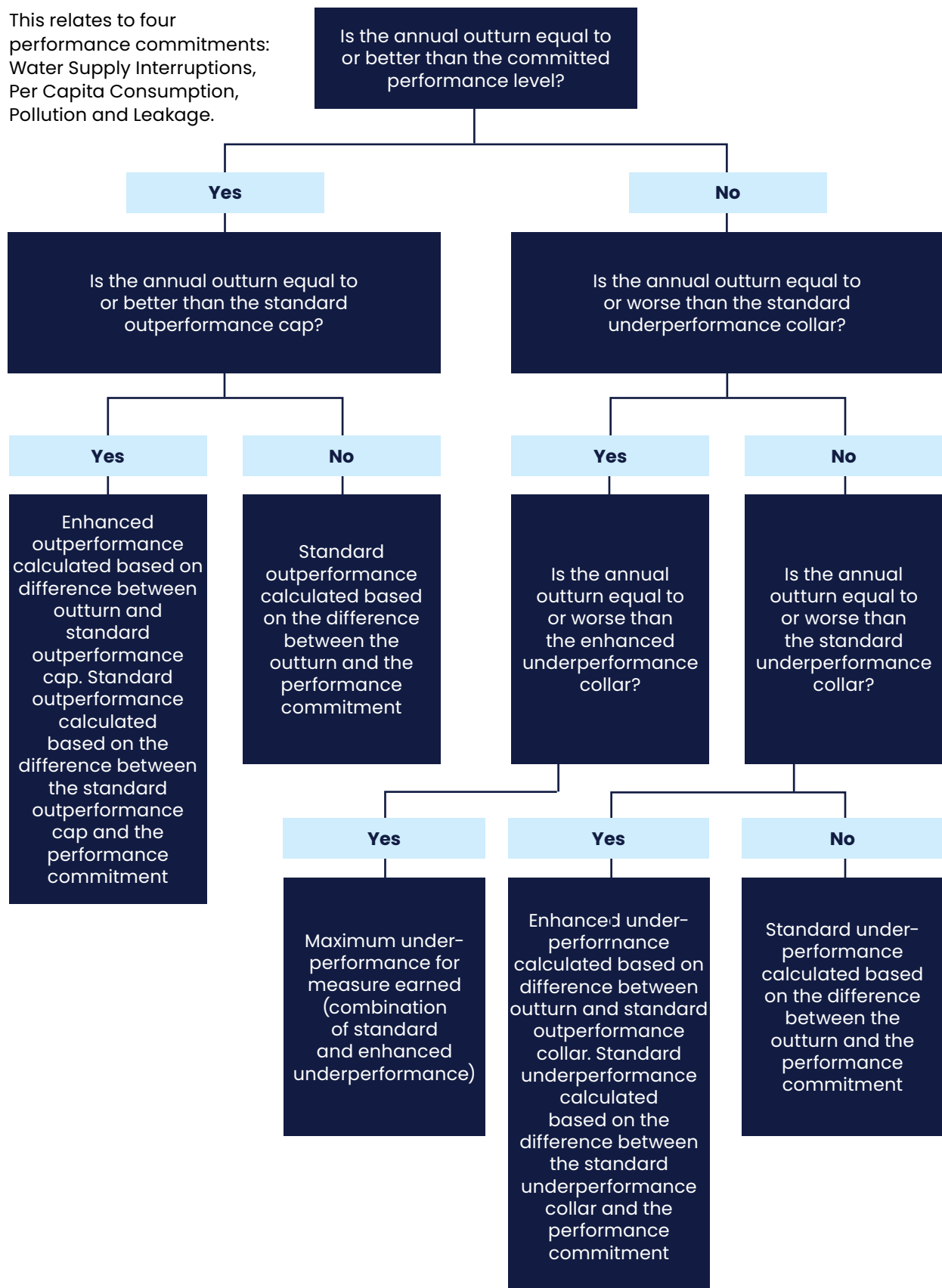
There are four performance commitments with ODIs (working with others, land conserved and enhanced, length of river improved and living with water) that are measured over the course of the whole AMP. Our remaining 15 performance commitments are reputational measures and do not have a financial incentive attached to them.

## Standard two sided incentives calculation methodology

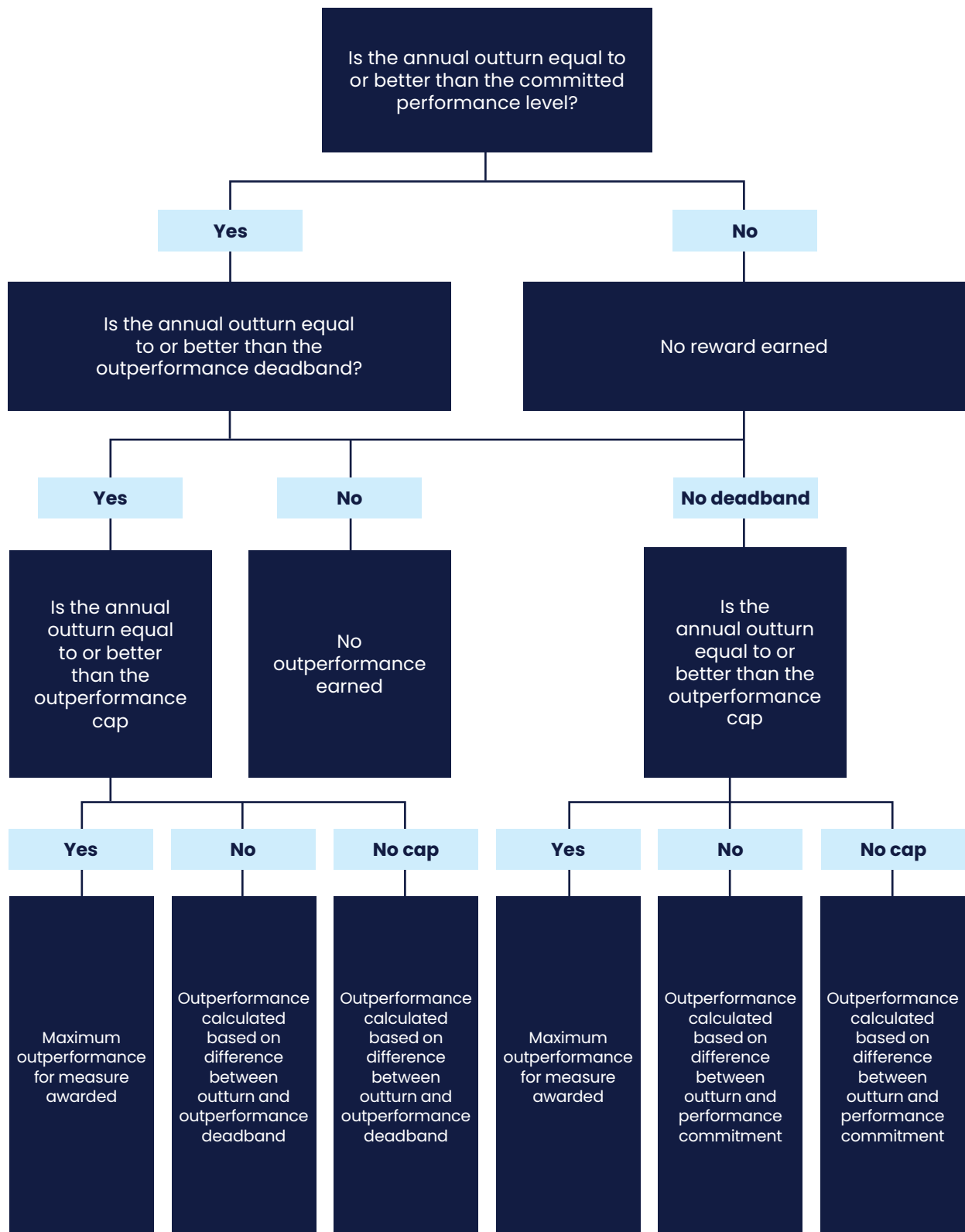


## Enhanced two sided incentives calculation methodology

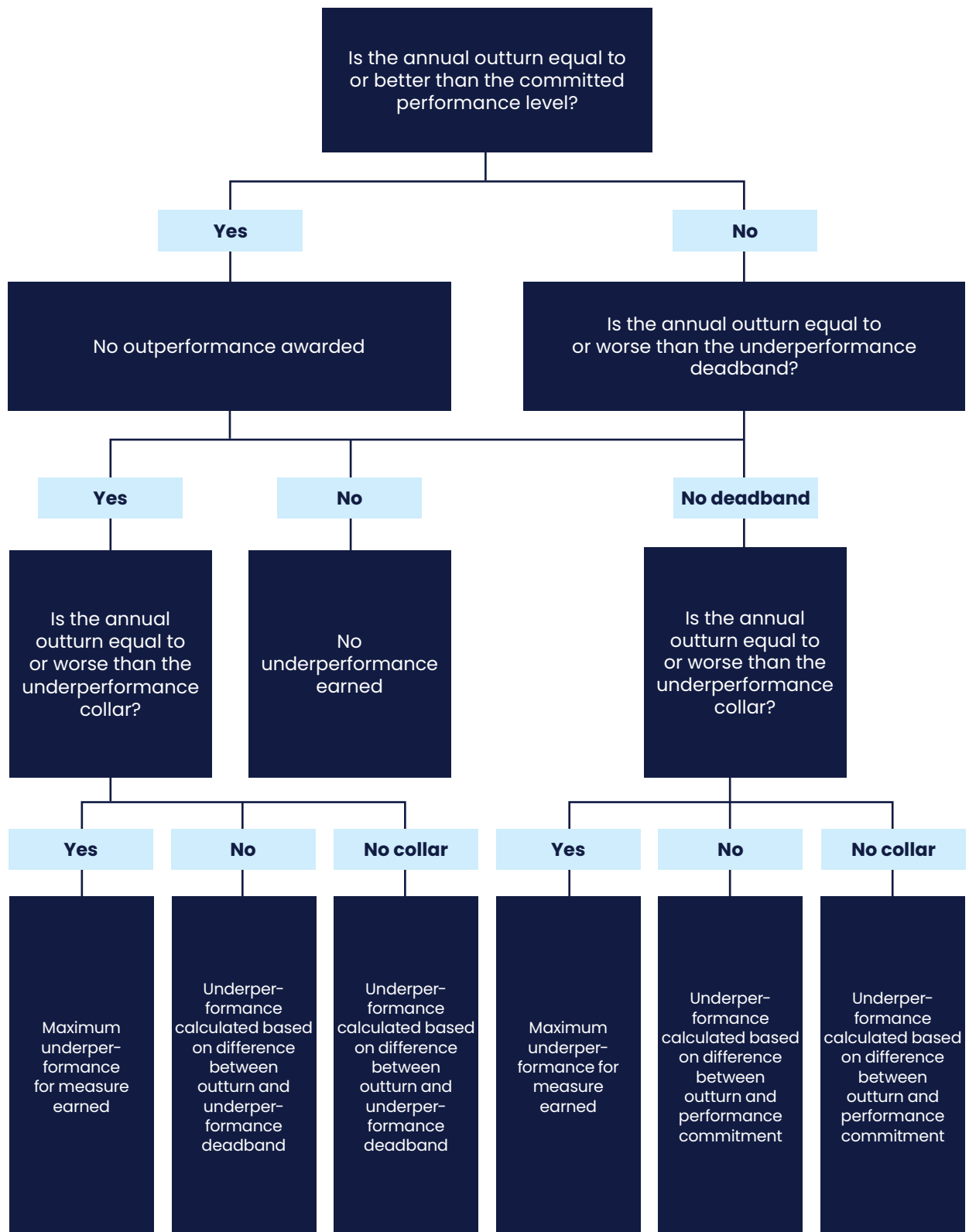
This relates to four performance commitments: Water Supply Interruptions, Per Capita Consumption, Pollution and Leakage.



## One sided incentives – Outperformance only calculation methodology



## One sided incentives – Underperformance only calculation methodology





# 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.**

## Discover Water

In recognition of this, 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' document each year using the information published by water companies in their Annual Performance Reports. This report compares the financial resilience and performance of the water sector.



# How did we perform against our performance commitments?

## Performance commitment table

We achieved 29 out of 44 performance commitments this year. The table below summarises the target and actual performance for each performance commitment. On the next few pages, we explain in a little more detail what went well and where we need to improve.

	Performance commitment	Unit	2020/2021 performance achieved	Our target	Commitment met
1	Water quality compliance (CRI)	Numerical CRI score, reported to two decimal places	2.34	0	×
2	Water supply interruptions	Hours:minutes:seconds (HH:MM:SS) per property per year, reported to zero decimal places	00:07:14	Less than or equal to 00:06:30	×
3	Leakage	Percentage reduction from 2019/2020 baseline, reported to one decimal place	3.5%	More than or equal to 3.4%	✓
4	Per capita consumption	Percentage reduction from 2019/2020 baseline, reported to one decimal place	-3.4%	More than or equal to 2.4%	×
5	Mains repairs	Number of repairs per 1,000 km of mains, reported to one decimal place	215.0	Less than or equal to 186.1	×
6	Unplanned outage	Percentage of peak week production capacity, reported to two decimal places	3.87%	Less than or equal to 5.12%	✓
7	Risk of severe restrictions in a drought	Percentage of population at risk, reported to one decimal place	0.0%	Less than or equal to 0%	✓



	Performance commitment	Unit	2020/2021 performance achieved	Our target	Commitment met
8	Priority services for customers in vulnerable circumstances	PSR reach: percentage of applicable households, reported to one decimal place.	3.5%	More than or equal to 4.0%	✗ overall
		Actual contacts: percentage of applicable households, reported to one decimal place.	17.3%	More than or equal to 17.5%	
		Attempted contacts: percentage of applicable households, reported to one decimal place.	46.3%	More than or equal to 45.0%	
9	Internal sewer flooding	Number of incidents per 10,000 sewer connections, reported to two decimal places	3.34	Less than or equal to 1.68	✗
10	Pollution incidents	Number of pollution incidents per 10,000 km of the wastewater network to two decimal places	24.00	Less than or equal to 24.51	✓
11	Risk of sewer flooding in a storm	Percentage of population at risk, reported to two decimal places	5.60%	Less than or equal to 22.20%	✓
12	Sewer collapses	Number of collapses per 1,000 km of sewer network to two decimal places	15.67	Less than or equal to 18.26	✓
13	Treatment works compliance	Percentage compliance to two decimal places	99.04%	100%	✗
14	C-MeX	Score out of 100 to two decimal places	82.78		✓
15	D-MeX	Score out of 100 to two decimal places	62.25		✗
16	Working with others	Number of projects, reported to zero decimal places	7	More than or equal to 3	✓
17	Land conserved and enhanced	Number of hectares to zero decimal places	3,084 hectares	More than or equal to 3,048 Hectares	✓
18	Integrated catchment management	Percentage of catchments to one decimal place	0.0%	More than or equal to 0.0%	✓
19	Length of river improved	Kilometres of river to one decimal place	0.0 km	More than or equal to 0.0 km	✓
20	Biosecurity implementation	Number of pathways to zero decimal places	0	More than or equal to 0	✓
21	Operational Carbon	Percentage reduction to one decimal place	3.6%	More than or equal to 2.4%	✓

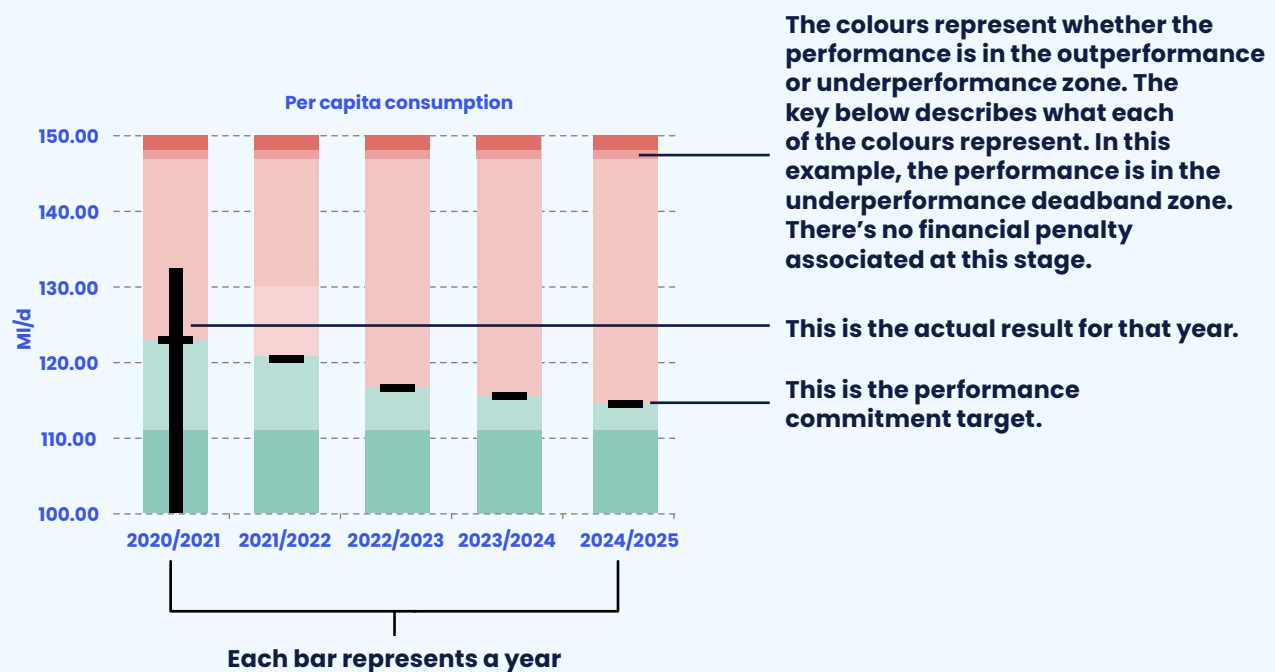
	Performance commitment	Unit	2020/2021 performance achieved	Our target	Commitment met
22	Capital Carbon and carbon arising from owned land	Percentage reduction to one decimal place	71.0%	Measured in year 5	✓
23	Education	Number of hours to zero decimal places	5,590	More than or equal to 20,000 hours	✗
24	Creating value from waste	Millions of pounds to zero decimal places	£3m	More than or equal to £0m	✓
25	Water recycling	Megalitres per day (MI/d) to two decimal places	0.00 MI/d	More than or equal to 0.00 MI/d	✓
26	Affordability of bills	Percentage of customers to zero decimal places	82%	More than or equal to 81%	✓
27	Direct support given to customers	Number of customers to zero decimal places	61,406	More than or equal to 58,000	✓
28	Cost of bad debt	Percentage of the average annual residential bill, measured to two decimal places	3.00%	Less than or equal to 3.23%	✓
29	Priority services awareness	Percentage of customers to zero decimal places	43%	More than or equal to 50%	✗
30	Priority services satisfaction	Percentage of respondents giving a positive response to zero decimal places	91%	More than or equal to 82%	✓
31	Inclusive customer service	Percentage improvement to zero decimal places	24%	More than or equal to 4%	✓
32	Gap sites	Percentage to zero decimal places	19%	More than or equal to 80%	✗
33	Managing void properties	Percentage of household properties classed as void, reported to two decimal places	4.73%	Less than or equal to 4.50%	✗
34	Drinking water contacts	Number of consumer contacts per 10,000 population, reported to one decimal place	10.5	Less than or equal to 11.4	✓
35	Significant water supply events	Number of events to zero decimal places	19	Less than or equal to 14	✗
36	Low pressure	Number of properties to zero decimal places	12	Less than or equal to 14	✓

	Performance commitment	Unit	2020/2021 performance achieved	Our target	Commitment met
37	Repairing or replacing customer owned pipes	Number of residential supply pipe repairs and renewals carried out by the company each year to zero decimal places	3,850	More than or equal to 6,882	✗
38	External sewer flooding	Number of incidents to zero decimal places	5,038	Less than or equal to 7,188	✓
39	Bathing water quality	Number of beaches to zero decimal places	16	More than or equal to 18	N/A
40	Surface water management	Number of hectares (Ha) to zero decimal places	1 hectare	More than or equal to 1 hectare	✓
41	Quality agricultural products	Percentage of biosolids sent to agricultural land that achieves Biosolids Assurance Scheme (BAS) certification to zero decimal places	100%	100%	✓
42	Renewable energy generation	Gigawatt-hours (GWh) to zero decimal places	278 GWh	More than or equal to 269 GWh	✓
43	Delivery of water industry national environment programme (WINEP) requirements	Text stating either "met" or "not met"	Met	Met target	✓
44	Living with Water		0	Measured in year 5	✓

# Understanding the charts

**We'll show how we're performing against our performance commitments using charts like the example below.**

The chart shows current year performance, the targets for each year and whether we are in the outperformance or underperformance zone for each year – all in a single chart.



## Key

- Performance better than reward cap
- Enhanced outperformance
- Standard outperformance
- Performance in reward deadband/no financial reward associated with good performance
- Performance worse than penalty collar
- Enhanced Underperformance
- Standard underperformance
- Performance in penalty deadband/no financial penalty associated with poor performance

# Explaining our performance information

We will be explaining our performance commitments using the table format below.

Information type	What we mean by this
<b>Definition</b>	This is the official definition that we have for each performance commitment. It describes what the performance commitment is and what it measures.
<b>Additional information</b>	Here we provide useful information which helps to define the performance commitment.
<b>Okay, so what does that actually mean?</b>	Sometimes our definitions can be quite technical, here we'll explain what each performance commitment means in plain English.
<b>Unit</b>	Here we'll explain what unit of measurement we'll use for each performance commitment.
<b>Measurement timing</b>	<b>Calendar year:</b> The year starting from January 1st to December 31st. <b>Financial year:</b> The year starting from April 1st to March 31st.
<b>Incentive form</b>	To make sure we deliver our performance commitments we have incentives which are categorised based on common language. These generate financial penalties when we fail to deliver and rewards if we're able to deliver more. These will be referred to as 'Revenue' incentives. Not all of our performance commitments have financial incentives, some have only reputational incentives based on how we perform against a target that reflects customers' views of us. These will be referred to as 'Reputational' incentives.
<b>Incentive type</b>	For revenue incentives, penalties will be referred to as 'underperformance' and rewards will be referred to as 'outperformance'. For reputational incentives we'll record them as 'N/A'.
<b>Timing of underperformance and outperformance payments</b>	Underperformance and outperformance payments can either be calculated each year, these will be referred to as 'in-period' or they can be calculated at the end of the AMP, these will be referred to as 'end of period'.

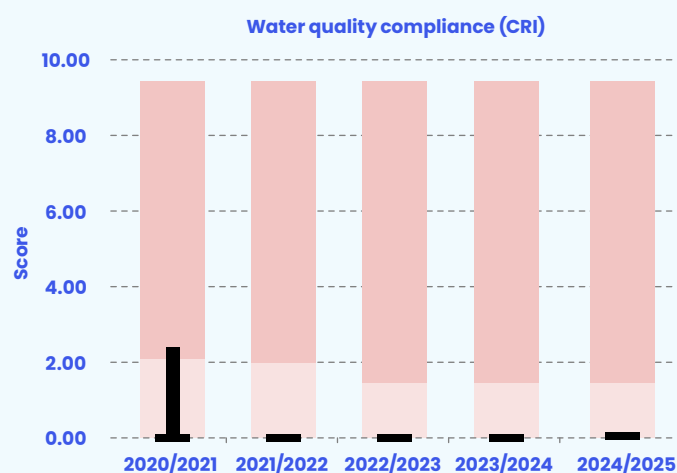
## Common performance commitments

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.

# Water quality compliance (CRI)

Information type	What we mean by this
<b>Definition</b>	The definition for this performance commitment is set by the Drinking Water Inspectorate (DWI) in collaboration with the industry. This is published as DWI Compliance Risk Index (CRI), August 2018
<b>Additional information</b>	A CRI score is calculated for every individual compliance failure at water supply zones, supply points and treatment works, and service reservoirs. The annual CRI, for any given calendar year, is the sum of the individual CRI scores for every compliance failure reported during the year (see the DWI Compliance Risk Index for further detail on the full calculations).
<b>Okay, so what does that actually mean?</b>	The CRI measures 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.
<b>Unit</b>	Numerical CRI score
<b>Measurement timing</b>	Calendar year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **0**

Result: **2.34**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

No water and sewerage company has ever achieved the performance commitment target level of zero for Compliance Risk Index (CRI). This target is set at an aspirational level because no level of exceedance of water quality standards can be considered acceptable. The Company's CRI score for 2020 is rounded to 2.3 at one decimal place. Our 2020 result represents an improvement from the score of 4.7 in 2019.

A substantial contribution to CRI in 2019 was due to two coliform bacteria detections at Chellow Heights Water Treatment Works (WTW), and a coliform and E. coli detection at Elvington WTW. Elvington WTW and Chellow Heights WTW are the Company's largest and second largest water treatment works and have high impact on our CRI measure. There were three detections of coliform bacteria from WTWs in 2020 but these were at relatively smaller sites, and there were no detections of Clostridium perfringens at WTWs in 2020. As a result, the overall contribution to CRI from bacterial detections at WTWs dropped from 2.5 in 2019 to 0.2 in 2020.

There was also a reduction in the contribution from aesthetic metals (aluminium, iron, manganese) detections in 2020. These metals are used as a direct measure of discolouration of water supplied to customers. The combined contribution from these three parameters reduced from 1.1 in 2019 to 0.4 in 2020. Some of this reduction may have been COVID-19 related. In addition to various other elements of standard variation, the benefit from the reduction in WTW bacteria and aesthetic metals, was balanced by an increased impact from laboratory reported taste and odour detections from Tophill Low WTW in Beverley near Hull.

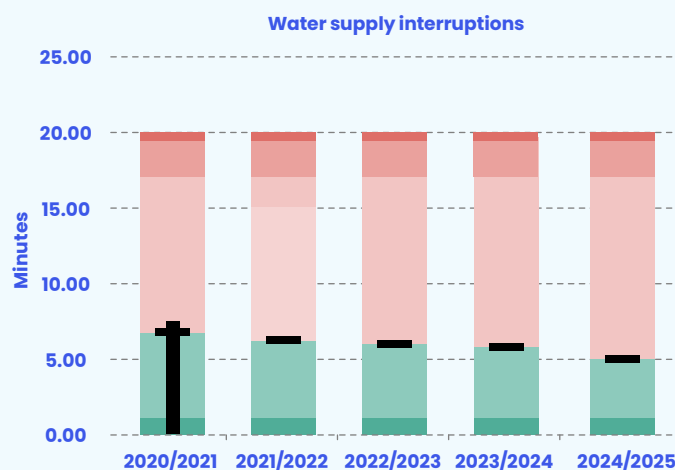
Tophill Low WTW has a known risk for the presence of earthy taste and odour causing compounds in the source water, and a scheme is in place to install additional treatment in AMP7. Overall taste and odour contributed 1.4 in 2020. Without the detections from Tophill Low WTW, the CRI score in 2020 was likely to represent the Company's best ever performance.

We have updated the result originally published in July 2021. The result has changed from 2.46 to an improved position of 2.34. This change is to align with the reported value published within the Drinking Water Inspectors Annual Report which can be accessed here: [dwi.gov.uk/what-we-do/annual-report/drinking-water-2020/](https://dwi.gov.uk/what-we-do/annual-report/drinking-water-2020/)

# Water supply interruptions

Information type	What we mean by this
<b>Definition</b>	<p>Reducing interruptions to water supply is defined in the reporting guidance for PR19 – Supply Interruptions, published on 27 March 2018</p> <p>Calculation of performance is carried out using the following equation:  <math display="block">\frac{((\text{Properties with interrupted supply} \geq 180 \text{ mins}) \times \text{Full duration of interruption})}{\text{Total number of properties supplied (year end)}} = \text{average number of minutes lost per customer}</math></p>
<b>Additional information</b>	<p>Helpful definitions:</p> <p><b>Properties supplied:</b> properties shall include billed mains pressure fed household and non-household properties connected to the company's water supply.</p> <p><b>Supply interruption:</b> is defined as when the supply of water to a property is at a pressure of three metres or less (adjusted for any difference in ground or property level).</p> <p><b>Duration of interruption:</b> is defined as the length of time for which properties are without a continuous supply of water at a pressure over three metres. The duration shall only be considered in the calculation of the metric where the duration is three hours or greater.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the average supply time lost per customer, across all our customers, for interruptions that lasted three hours or more.
<b>Unit</b>	Hours:minutes:seconds (HH:MM:SS)
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **less than or equal to 00:06:30**

Result: **00:07:14**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

We experienced a busy start to 2020/2021, with a long dry spell from April to June 2020 where we had a number of supply/demand issues and a large event in Sheffield. After this time performance remained relatively stable, with an increase in network activity over the winter months of January and February 2021 due to prolonged cold weather where we experienced our highest ever volume of emergency jobs raised.

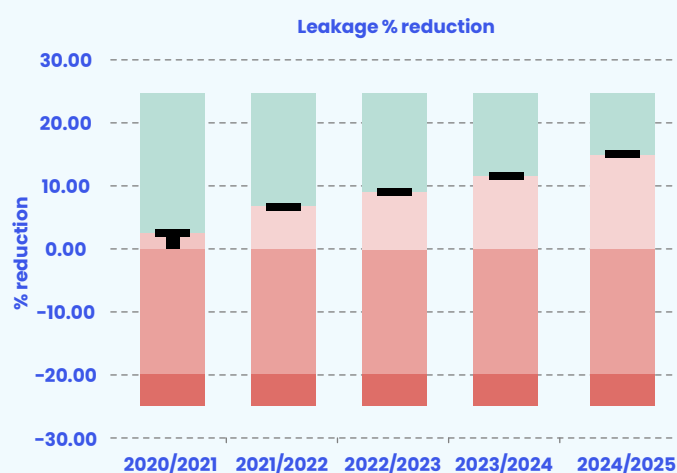
We've also experienced several large (>10 customer seconds lost) impacting events in 2020/2021 that have made up over two minutes of this year's performance. The highest impact was seen at Askern in February 2021. This was due to a large burst and water tower failure generating large scale interruptions and low water pressures through nine distribution maintenance areas. This single event accounted for 29.887 seconds of the 2020/2021 Water Supply Interruptions performance.



# Leakage

Information type	What we mean by this
<b>Definition</b>	<p>The percentage reduction of three-year average leakage in megalitres per day (ML/d) from the 2019/2020 baseline. The total level of leakage is defined in the Final reporting guidance for PR19 – Leakage, published on 27 March 2018:</p> <p>Three-year average values are calculated from annual average values for the reporting year and two preceding years and expressed in megalitres per day (ML/d).</p>
<b>Additional information</b>	<p>Helpful definitions:</p> <p><b>Total leakage</b> is defined as the sum of distribution system leakage, including service reservoir losses and trunk main leakage plus customer supply pipe leakage. <b>Baseline total leakage</b> is calculated as a three-year average of annual values for 2017/2018, 2018/2019 and 2019/2020 and expressed in megalitres per day (ML/d).</p>
<b>Okay, so what does that actually mean?</b>	<p>This measures the amount of water lost between our treatment works and our customers' taps. We measure water lost through leaks in megalitres per day (ML/day) and the number doesn't include water lost inside buildings and homes. Our target is to reduce leakage from the 2019/2020 baseline by 3.4%.</p>
<b>Unit</b>	<p>Percentage reduction from 2019/2020 baseline, reported to one decimal place. The volumetric levels resulting from the application of the percentage reduction in megalitres per day (ML/d) reported to one decimal place.</p>
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – higher is better



Target: **More than or equal to 3.4%**

Result: **3.5%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

We're pleased to report that we've achieved our regulatory target for leakage in 2020/2021 with a result of 289.8 MI/d. This is a 3.5% reduction from our three-year baseline submission. Our largest improvement has been made in the reduction of leakage on our upstream/trunk main network. There's been a 16 MI/d reduction over the last year and significant improvements in methodology, reporting and leakage detection practices on our trunk main network.

Baseline total leakage is calculated as a three-year average of annual values for 2017/2018, 2018/2019 and 2019/2020 and expressed in megalitres per day (MI/d). The 2019/2020 baseline total leakage level was reported in the 2019/2020 Annual Performance Report as 313.4 MI/d. The move to convergence has had an impact on our leakage baseline. The baseline that will be used to measure our AMP7 performance from is 315.3 MI/d. This change in the baseline does not represent a deterioration/improvement in our performance or a change in the amount of leakage reported for the previous three-year period.

This revised baseline has changed primarily due to improvements in our water balance calculations, including improving trunk main leakage reporting, backdating a new approach for estimating population and improving household night use estimates, as well as a Netbase software upgrade that was delivered in June 2020 to allow for compliant reporting with the new AMP7 methodology.

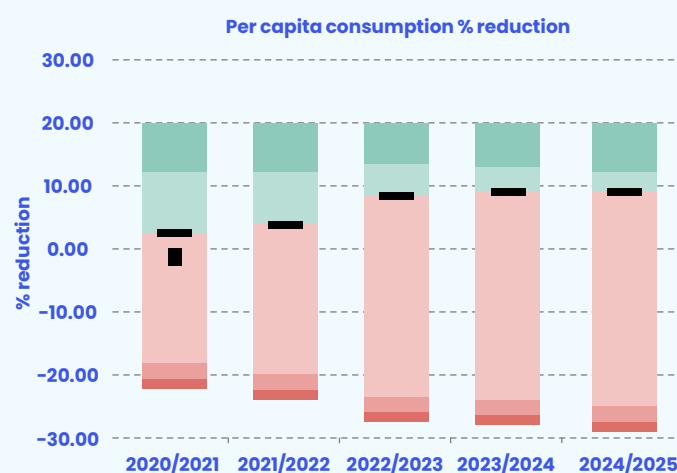




# Per capita consumption

Information type	What we mean by this
<b>Definition</b>	<p>Per capita consumption is defined in the Final reporting guidance for PR19 – Per Capita Consumption, published on 27 March 2018:</p> <p>Three-year average values are calculated from annual average values for the reporting year and two preceding years and expressed in litres/person/day (l/p/d).</p>
<b>Additional information</b>	Per capita consumption is defined as the sum of measured household consumption and unmeasured household consumption divided by the total household population.
<b>Okay, so what does that actually mean?</b>	This is how much water the average person uses each day. It's important we use water carefully to make sure there's enough for everyone. This only covers household use and is measured in litres per person per day. Our target is to reduce consumption from the 2019/2020 baseline by 2.4%.
<b>Unit</b>	Percentage reduction from 2019/2020 baseline, reported to one decimal place. The volumetric levels resulting from the application of the percentage reduction in litres/person/day (l/p/d) reported to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – higher is better



Target: **More than or equal to 2.4%**

Result: **-3.4%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

In 2020/2021, our customers used an average of 141.2 litres per person (per day) which is an increase of 13.5 litres since 2019/2020. We've seen that the COVID-19 pandemic has led to significant changes in our customers water use and our customers have spent more time at home. We're disappointed to report that we didn't achieve our target of 125.1 litres per person, and our three-year rolling performance was 132.5 litres per person.

Household water usage was significantly higher in 2020/2021 due to changes in customer behaviour and an early hot and dry summer. The combination of local and national lockdowns due to COVID-19 meant that more of our customers were at home due to furlough, working from home, or not being able to attend school or university.

Another factor was that the weather in late spring and early summer of 2020 was warm, sunny and dry. It was cooler in late June and July 2020 and household water usage dropped. This coincided with the reopening of hospitality venues in England in July when more of the population returned to work, and others spent more time outside, reducing the average PCC. 'Travel corridors' were also introduced in July 2020 and holiday bookings increased allowing our customers to spend more time away from home and therefore reduce their household usage.

Our baseline is calculated as an average of 2017/2018, 2018/2019 and 2019/2020 performance. At APR20, we submitted our performance for these three years with our most-compliant methodology at the time. The 2019/2020 baseline PCC level was reported in the 2019/2020 Annual Performance Report as 130.1 l/p/d. We have since improved aspects of the Company water balance (from which PCC is produced) and this has changed the baseline position. The baseline that will be used to measure our AMP7 performance from is 128.2 l/p/d. This change in the baseline does not represent a deterioration/improvement in our performance or a change in the amount of leakage reported for the previous three-year period.

Our Year 1, three-year rolling performance is 132.5 l/h/d, calculated as an average of our performance in 2018/2019, 2019/2020 and 2020/2021. This is equivalent to a 3.4% increase from our baseline of 128.2 l/h/d, or 4.3 l/h/d in absolute terms. Following publication of our original APR in July 2021, we identified that the figures previously stated in this commentary were incorrect and did not align with the information published correctly within the supporting data tables. This commentary has been updated as a result.

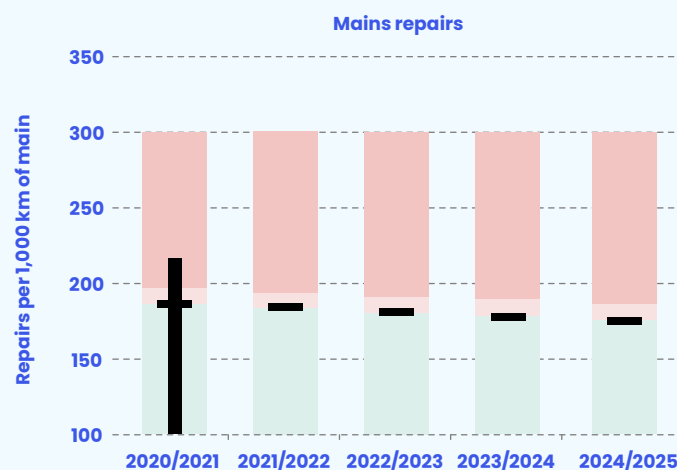
Throughout 2020/2021, Yorkshire Water undertook various activities under its water conservation campaign. We created over 76 million opportunities for customers to see and hear our messages and generated over 73,000 clicks to our water saving pages, although the impact of lockdown made it difficult for us to utilise usual out of home advertising means. With lockdown and a focus on hygiene in mind we focused on the majority of our water saving tips on water saving tips for the garden. This focus led us to introduce a "Garden Getaways" campaign in July 2020 in which we worked with social media influencers to share water saving tips for the garden. We know that consumers were spending more time in their gardens during lockdown and aimed to showcase the most spectacular transformations, giving special attention to those that have done the job in the most water saving savvy way. The competition generated lots of discussion on social media channels and a high engagement rate of 10.2%.

In August 2020, we launched a water saving promise for non-household customers, a commitment from businesses to use less water. The promotion of this campaign was hindered by local lockdowns and the restrictions on different industries. This meant that communication around the Water Saving Promise was sporadic. However, we plan to continue the promotion of this campaign over the next year to increase sign ups.

# Mains repairs

Information type	What we mean by this
<b>Definition</b>	Mains repairs is defined in the reporting guidance for PR19 – Mains repairs per 1000 km, published on 27 March 2018.  It's reported as the number of mains repairs per thousand kilometres of the entire water main network (excluding communication and supply pipes).
<b>Additional information</b>	Helpful definitions: <b>Mains repairs</b> – This includes all physical repair work to mains from which water is lost. <b>Mains length</b> – This is the length of all pipes conveying treated water around the distribution point but not including communication pipes or supply pipes.
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of mains repairs we carry out on our clean water mains network per 1,000 km. This number doesn't include repairs to communication and supply pipes.
<b>Unit</b>	Number of repairs per 1000 km of mains, reported to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

Our target was to make sure we carried out no more than 5,916 mains repairs throughout the year. However, the cold winter of 2020/2021 resulted in more bursts and leaks on our mains than we expected. We're disappointed to report that we repaired 6,907 leaking mains in the last 12 months.

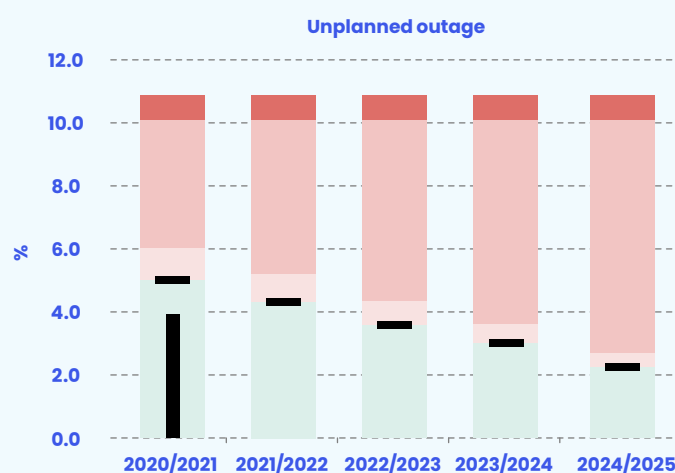
In our original APR submission, published in July 2021, we reported a total figure of 6,882 mains repairs against this performance commitment. However, following a query received from our Regulator Ofwat, which provided additional clarification on what else needed to be included in this measure to ensure consistency of reporting across the industry, we have updated our reported value to 6,907 mains repairs. The impact of this on the performance commitment, which is reported as a value of number of mains repairs per 1,000km of water mains to assist with the comparison of performance across the industry, is an increase from 215.0 to 215.8 mains repairs per 1,000km of water mains.



# Unplanned outage

Information type	What we mean by this
<b>Definition</b>	<p>Unplanned outage is defined in the reporting guidance for PR19 – Unplanned Outage, published on 4 April 2019.</p> <p>This measure is reported as the temporary loss of peak week production capacity (PWPC) in the reporting year weighted by the duration of the loss (in days). Unplanned outage for each water production site is calculated separately and then summed over the reporting year to give a total actual unplanned outage for the water resource zone. The water resource zone weighted outage is then summed (MI/d) and normalised based on overall peak week production capacity to be reported as a percentage.</p>
<b>Additional information</b>	This performance commitment helps to ensure that the overall asset health of the above-ground water assets is maintained and improved for the benefit of current and future generations.
<b>Okay, so what does that actually mean?</b>	It's important that our water treatment works operate reliably. Sometimes our water treatment works shut down because of equipment failures, we call this an 'unplanned outage'. This performance commitment measures the percentage of time are treatment works are down. We want this number to be as low as possible.
<b>Unit</b>	Percentage of peak week production capacity, reported to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **Less than or equal to 5.12%**

Result: **3.87%**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

After year 1 of our current AMP we've recorded an unplanned outage at 3.87%. We're pleased that we're below our year 1 target of 5.12%. This has been achieved through increased focus and assurance on our operational and reporting procedures in addition to the development and successful implementation of several improvement initiatives.

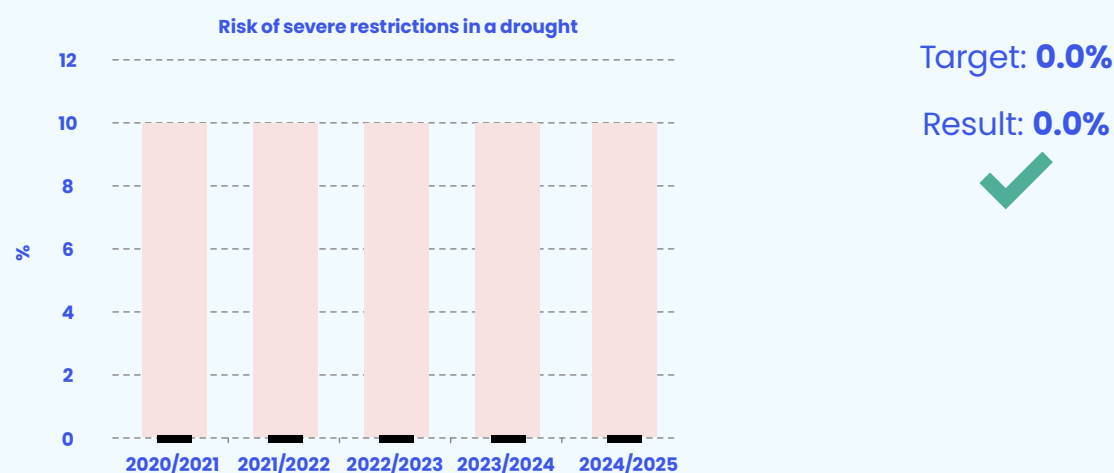
**Our performance has improved this year through increased focus and assurance on our operational and reporting procedures. In addition, a number of initiatives developed to target unplanned outage performance have also been progressed:**

- Purchase of strategic spares for a number of key high-risk assets and sites.
- A risk-based approach to the backlog of maintenance jobs managed weekly through the unplanned outage hub which is a management forum meeting twice weekly to review risk and outage incidents.
- Proactive engagement with all the key unplanned outage stakeholders and a new weekly Asset Resilience Report on performance, risk and site activity.
- Recruitment of a specialist unplanned outage role who is responsible for validating all outages.
- A dynamic maintenance project where a pilot is underway in one of our operational areas.
- An updated procedure for water quality exemptions, for water treatment sites outside the normal water quality operating bands for key parameters including raw water colour, temperature, turbidity and nitrate levels.
- An updated mobile application and the use of telemetry data to understand local situations and record outage information as accurately as possible.

# Risk of severe restrictions in a drought

Information type	What we mean by this
<b>Definition</b>	<p>The performance commitment on drought risk is defined in the reporting guidance – Drought resilience metric, published on 13 March 2018:</p> <p>The overall metric is reported on a company basis, as the percentage of the customer population at risk of experiencing severe restrictions in a 1-in-200-year drought, on average, over 25 years.</p>
<b>Additional information</b>	<p>The metric is calculated using the following formula: At risk if, <math>DO - OA &lt; DD + TH</math></p> <p>Where:</p> <p>Deployable output (supply) = DO</p> <p>Outage allowance (unavailable supply) = OA</p> <p>Dry year demand = DD</p> <p>Target headroom (uncertainty) = TH</p> <p>The annual percentage of customers at risk is then calculated by dividing total numbers of customers at risk (i.e. population of a water resource zone) by the total number of customers served by the company.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures how many of our customers would be at risk of experiencing harsh water restrictions in a 1-in-200-year drought, on average, over the next 25 years.
<b>Unit</b>	Percentage of population at risk reported to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

## Performance chart – lower is better



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

The calculations for the percentage of the Yorkshire population at risk of restrictions in a severe drought, show a deficit in our supply demand balance (SDB) in the last 3 years of our 25-year planning period, where 12% of the population are at risk.

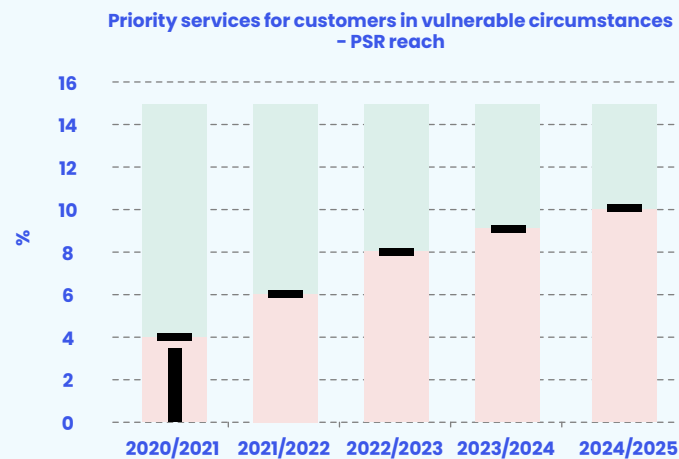
The percentage of the population forecast to be affected by severe drought restrictions in a 1 in 200-year drought event was 0% for the reporting year 2020/2021. This is the average percentage based on the 25-year planning period for our baseline planning scenario and reflects the population at risk of the average supply demand deficit over the 25 years without any of our solutions to the deficit.



# Priority services for customers in vulnerable circumstances

Information type	What we mean by this
<b>Definition</b>	<p>This performance commitment is defined in the reporting guidance as the common performance commitment for the Priority Service Register (PSR)'. This performance commitment consists of the following criteria:</p> <ul style="list-style-type: none"> <li>- The PSR reach: percentage of households that we supply with water and/or wastewater services that are registered on our PSR.</li> <li>- Attempted contact: percentage of distinct households on the PSR that we've attempted to contact over a two-year period.</li> <li>- Actual contact: percentage of distinct households on the PSR that we've actually contacted over a two-year period.</li> </ul> <p>To achieve compliance with this performance commitment the reach, attempted contact and actual contact targets should be achieved.</p>
<b>Additional information</b>	<p>Useful definitions:</p> <p><b>PSR [households]</b> – Number of households on the PSR (recorded on 31 March 2021).</p> <p><b>Total households</b> – Total number of households served (recorded on 31 March 2021).</p> <p><b>Attempted contact</b> – Distinct households which we've attempted to contact over a two-year period (recorded on 31 March 2021).</p> <p><b>Actual contact</b> – Distinct households where we've had actual contact over a two-year period (recorded on 31 March 2021).</p>
<b>Okay, so what does that actually mean?</b>	<p>Our PSR offers free extra services to our vulnerable customers who need them. We want to make sure our vulnerable customers are using this service, so this performance commitment measures the percentage of household customers who're getting support through our PSR.</p>
<b>Unit</b>	<p><b>PSR reach:</b> percentage of applicable households, reported to one decimal place.</p> <p><b>Actual contacts:</b> percentage of applicable households, reported to one decimal place.</p> <p><b>Attempted contacts:</b> percentage of applicable households, reported to one decimal place.</p>
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

## Performance charts – higher is better for all

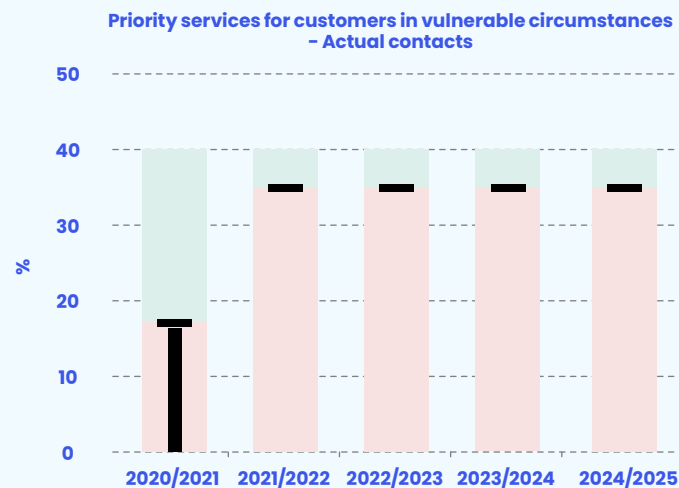


Reach target:  
**More than or equal to 4.0%**

Result: **3.5%**



See page 57 of this report for an explanation of what this chart shows and the key.

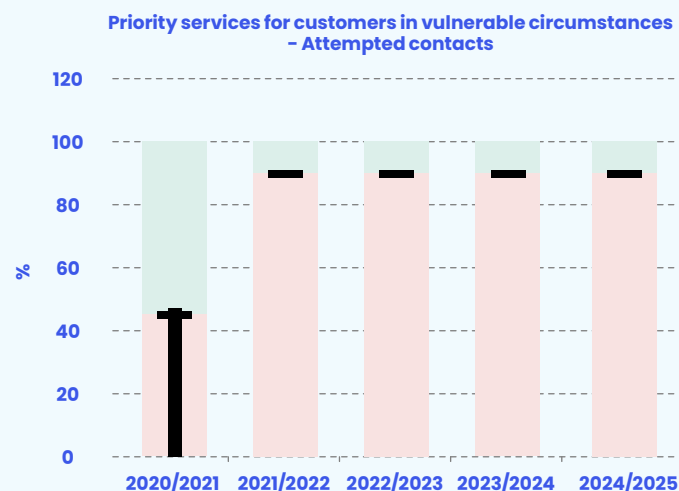


Actual contact target:  
**More than or equal to 17.5%**

Result: **17.3%**



See page 57 of this report for an explanation of what this chart shows and the key.



Attempted contact target:  
**More than or equal to 45.0%**

Result: **46.3%**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

This performance commitment is common amongst all water companies. To ensure that we're able to support our customers properly it is important that households where people in vulnerable circumstances live can sign up for our priority services.

The PSR allows customers to inform us about their circumstances so that we can provide services to support them. This may include Braille bills or deliveries of bottled water where a customer's supply has been affected.

We have other bespoke performance commitments that complement this measure such as priority services awareness and satisfaction. Increasing awareness of our PSR increases the number of customers who sign up and provides information to people who may find themselves temporarily needing the service.

In our reporting we count a household as one PSR customer even if there are multiple people on the register. As all water companies have this measure it's possible to see how others are doing.

With 3.5% of our households on the priority services register we didn't reach our target of 4.0% to deliver the services all our vulnerable customers need. However, we've still delivered our services to an additional 12,000 customers which is great news, but we know we can do more.

We're focused on reaching those customers who we know will really benefit from the service. The definition we use for vulnerability is wide enough to include many types of needs, and some of these customers are already very engaged with us making it easier for them to take advantage of the service. In particular we've focused on using different types of messaging via social media and have begun working in partnership with local charities to break down the challenges we have in engaging with some of our customers.

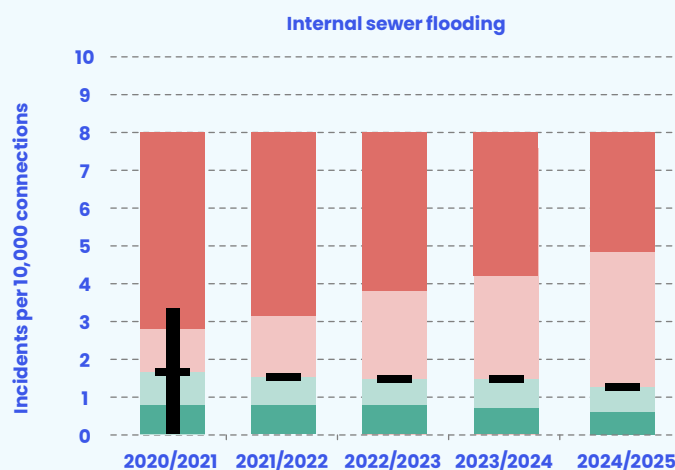
Our contact performance of 17.3% was slightly below our 17.5% target for making actual contact. But our performance of 46.3% against a target of 45.0% for attempted contacts demonstrates our efforts. We're continuing to improve our methods of contacting vulnerable customers to make it easy for them to access our priority services.

We've over 40,000 customers who have been on our PSR for over two years. We made some significant progress on the attempted contact of these customers this year.

# Internal sewer flooding

Information type	What we mean by this
<b>Definition</b>	The internal sewer flooding measure is defined in the reporting guidance for PR19 – Sewer Flooding, published on 28 April 2018:
<b>Additional information</b>	<p>Useful definitions:</p> <p><b>Internal flooding:</b> is defined as flooding which enters a building or passes below a suspended floor.</p> <p><b>Flooding event:</b> is defined as the escape of water from a sewerage system, irrespective of size as evidenced by standing water, running water or visible deposits of silt or sewage solids. It includes flooding due to overloaded sewers (hydraulic flooding) and due to other causes (FOC).</p> <p><b>Severe weather:</b> is defined as individual rainfall events with a storm return period greater than 1 in 20 years. Flooding incidents caused by severe weather should be included in this measure.</p> <p><b>Sewer length:</b> Include the length of the entire network, including sewers that transferred to their responsibility under the Transfer of Public Sewers Regulations 2011. The company should separately record the length of transferred sewers, the calculation of this measure should be based on the latest measurements of the length.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the total number of internal sewer flooding incidents through the year per 10,000 sewer connections.
<b>Unit</b>	Number of incidents per 10,000 sewer connections reported to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **Less than or equal to 1.68**

Result: **3.34**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

In 2020/2021, we didn't achieve our performance commitment for internal sewer flooding with 778 incidents against a target of 391, however this was 824 incidents fewer than the previous year. We continue to invest in Yorkshire's drainage network and reduce the risk from internal sewer flooding, and we've increased our proactive maintenance of the sewer network in 2020/2021 to remove sewer blockages and maintain sewer capacity.

We've invested significantly to transform our approach to sewer flooding at every stage in the incident process. The changes and improvements can be categorised into:

- Elimination at source
- Enhanced initial response
- Elimination of repeat incidents
- Improved management information and governance

We've worked to enhance the service provided to customers and improve our performance on internal sewer throughout the year which have been delivered through sustained, coordinated activities across Yorkshire Water and with our service partner, Amey.

To reduce the number of internal flooding incidents at customer properties, this year we've:

- invested £20.4m in proactive schemes to prevent initial flooding incidents occurring.
- carried out sewer investigations at 168,313 properties at risk of internal sewer flooding and 4,400 properties with a history of internal sewer flooding.
- worked with our Service Partner Amey to visit 13,179 properties to carry out network investigations and defect resolution.
- increased proactive sewer investigations and repaired 8,134 defects identified following these investigations.
- carried out desilts at 170 km sewer.
- invested £23.2m in the reactive maintenance of our network.

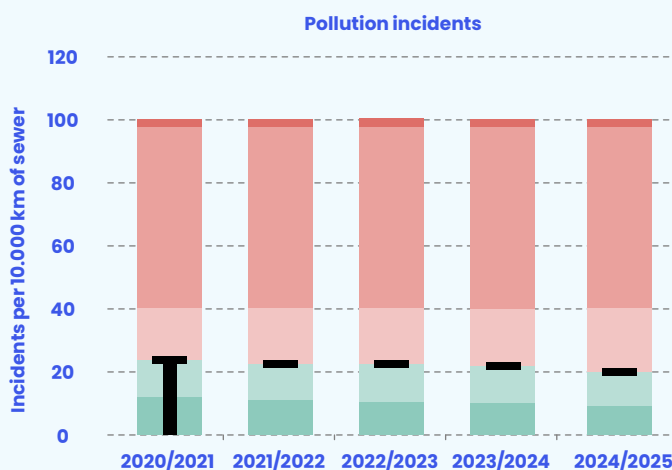
Internal sewer flooding is a common performance commitment with a new definition that all companies across the industry are reporting against. To allow for comparative reporting it is really important that we are transparent on our compliance with the reporting definition. Through our assurance process this year it was recognised that improvements could be made to the consistency applied when identifying neighbouring properties that have potentially been affected by a sewer flooding incident. Our external auditors, Atkins, found that in some instances, from the evidence presented, assurance could not be given that reasonable efforts were made to identify the extent of flooding by contacting an appropriate number of neighbouring properties. Overall, Atkins' have assessed this issue as amber, meaning incomplete data set or minor errors identified that do not alter the performance reported relative to targets and threshold values. Yorkshire Water does have a process in place which identifies these properties, however we are implementing further process improvements to ensure consistency of site activities undertaken and their subsequent documentation.



## Pollution incidents

Information type	What we mean by this
<b>Definition</b>	Pollution Incidents is defined in the following guidance for PR19 – Water & Sewerage Company Environmental Performance Assessment (EPA) Methodology (version 3). Published November 2017 by the Environment Agency.
<b>Additional information</b>	This measure will be reported as both the absolute number of pollution incidents and a normalised value of pollution incidents per 10,000 km of sewer.
<b>Okay, so what does that actually mean?</b>	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.
<b>Unit</b>	Number of pollution incidents per 10,000 km of the wastewater network to two decimal places.
<b>Measurement timing</b>	Calendar year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

### Performance chart – lower is better



Target: **Less than or equal to 24.51**

Result: **24.00**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

The Environment Agency class serious pollution incidents as category 1 or 2. This year we're disappointed that we're above target for category 1 and 2 incidents with three incidents against a target of zero. Although this is an improved position from 2018 and 2019, we recognise the need to go further and we're working to achieve the ambitious performance commitment during AMP7. In our 2020 reporting, we have continued to exclude consented storm spill events. The reason these have not been included in 2019 and 2020 reporting is due to revised guidance from the Environment Agency. Consented storm spill events have been deemed by the Environment Agency to be compliant combined sewer overflow (CSO) discharges and are deemed not to be having an unacceptable impact on the environment. The updated guidance was confirmed by the Environment Agency in March 2020. The Yorkshire Forum for Water Customers and the Yorkshire Water Board have been made aware of, and approved, this position.

Of our three serious incidents two of these relate to the same asset, a burst on Hoyle Mill Lane Rising Main. The third incident relates to Darnell Road CSO and was due to a blockage of rags and wipes in the downstream sewer.

Other (or minor) pollution incidents are classed as category 3. The number of category 3 pollution incidents in 2020 has meant we delivered on our performance commitment (122 incidents versus a target of 128 or fewer).

Our pollution incident reduction plan explains how we will reduce pollution incidents across our asset base. Pollution can arise from any of our assets: our water treatment works, our wastewater treatment works, our water distribution system and our sewerage system. Pollution arises from asset failures such as burst pipes, from the impacts of severe weather such as flooding, or the handling and storage of chemicals used in treatment processes. For this reason, our pollution incident reduction plan covers all assets with an emphasis on our sewage network as it accounts for most of our pollution incidents.

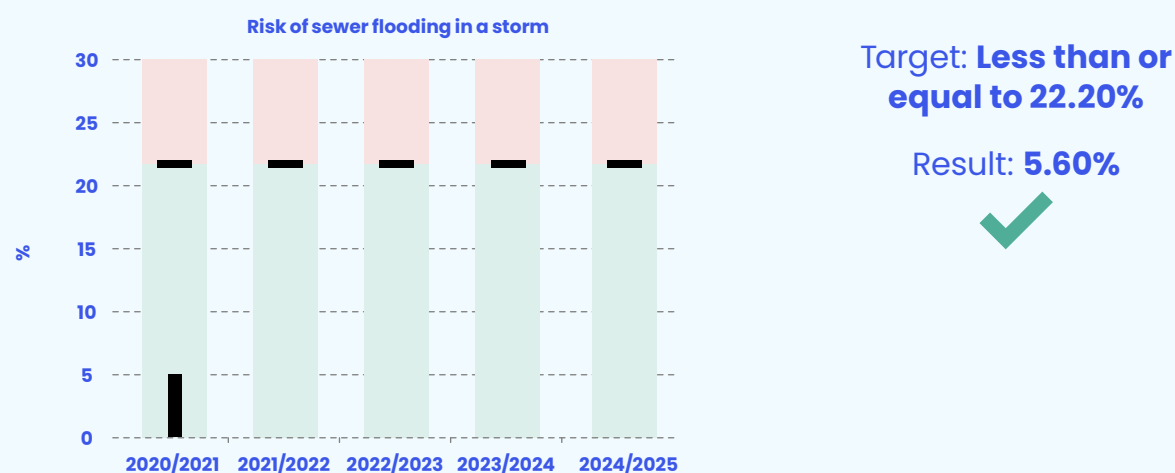
Our plan is aspirational and will be dynamic as it evolves to meet the scale of the challenge and develop and deploy the most cost-effective solutions. We'll review our plan quarterly with the Environment Agency.

The performance commitment level for 2020 was 24.51 pollution incidents per 10,000 km of sewer length for which the company is responsible for. Yorkshire Water had 24.00 incidents per 10,000 km of sewer in 2020. This was made up of three Category 2 pollution incidents and 122 Category 3 incidents.

## Risk of sewer flooding in a storm

Information type	What we mean by this
<b>Definition</b>	The performance commitment risk of sewer flooding in a storm is defined in the reporting guidance – risk of sewer flooding in a storm, published on 4 April 2019:
<b>Additional information</b>	The term “storm” is defined as a 1-in-50-year rainfall event. Domestic population is considered at risk of sewer flooding using the parameters outlined in the methodology “Developing and Trialling Wastewater Resilience Metrics – Final Report for Water UK” produced by Atkins.
<b>Okay, so what does that actually mean?</b>	This performance commitment measures how many of our customers would be at risk of internal sewer flooding from a 1-in-50-year storm, based on modelled predictions.
<b>Unit</b>	Percentage of population at risk, reported to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

### Performance chart – lower is better



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

We're pleased to report a reduction in our risk of sewer flooding from 19.73% to 5.60%. This reduction isn't related to real changes in flood risk, but due to an improvement in our methodology, which involves alignment with our Drainage and Wastewater Management Plans, using more precise flooding predictions and improved rainfall data. This represents a more accurate way of calculating this performance commitment and fits in with the latest industry standards outlined by Water UK.

Some of the changes we've made to our methodology include:

- use of 2D flooding outputs for our flooding methodology, which is more representative of flood risk as it considers the topography of the land and the likely flood routing paths.
- use of storm durations of 60, 240, 480 minutes, to align with the specified methodology.

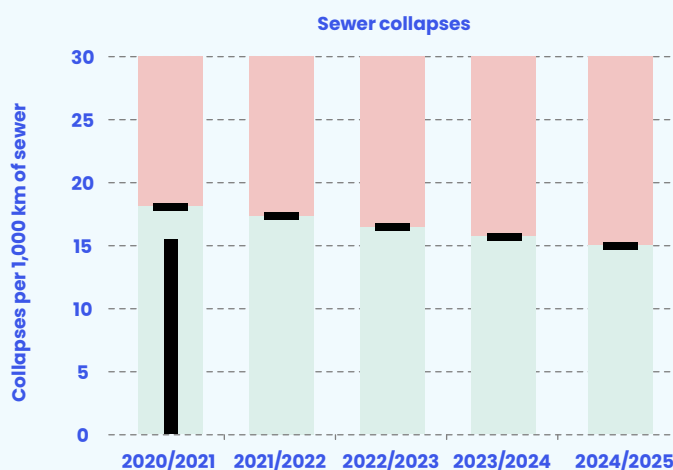
This significant reduction in the percentage of population at risk of flooding in a 1-in-50-year rainfall event figure does not represent a real change in the risk of sewer flooding, such as the implementation of significant flood alleviation schemes, but instead represents improvements and refinements in methodology and data sets.



# Sewer collapses

Information type	What we mean by this
<b>Definition</b>	Sewer collapses is defined in the reporting guidance – sewer collapses per 1000 km (updated), published on 4 April 2019:
<b>Additional information</b>	<p>Useful definitions:</p> <p><b>Sewer collapse:</b> A sewer collapse is considered to be 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. The measure intentionally doesn't refer to the magnitude of the collapse. The measure includes rising mains. Collapses on the entire network are to be reported.</p> <p><b>Sewer length:</b> Include the length of the entire network, including sewers that transferred to their responsibility under the Transfer of Public Sewers Regs 2011. The Company should separately record the length of transferred sewers, the calculation of this measure should be based on the latest measurements of the length.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of sewer collapses that affect our customers' supply or the environment, per 1,000 km of our sewer network.
<b>Unit</b>	Number of collapses per 1,000 km of sewer network to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **Less than or equal to 18.26**

Result: **15.67**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

We're pleased to report a figure of 15.67 sewer collapses per 1,000 km, which exceeds our target of 18.26. Through our proactive sewer maintenance programme, we're improving the performance of our network for pollution and sewer flooding performance by identifying issues and resolving them before they have an impact on our customers or the environment.

We have a programme of proactive projects which support improving performance of the network for both pollution and sewer flooding performance.

Our projects cover a number of activities to identify historic areas for CCTV and defect resolution and desilt and sweep jetting of identified poor performance areas.

Our proactive sewer maintenance programme is focusing activity in identified areas of poor performance for internal and external sewer flooding. We plan to survey 280,000 properties in 2021/2022 to undertake CCTV, cleansing and defect resolution.

This combined programme targets improving performance of the network and its impact on the customer and the environment by identifying issues and resolving them before they have an impact on performance.

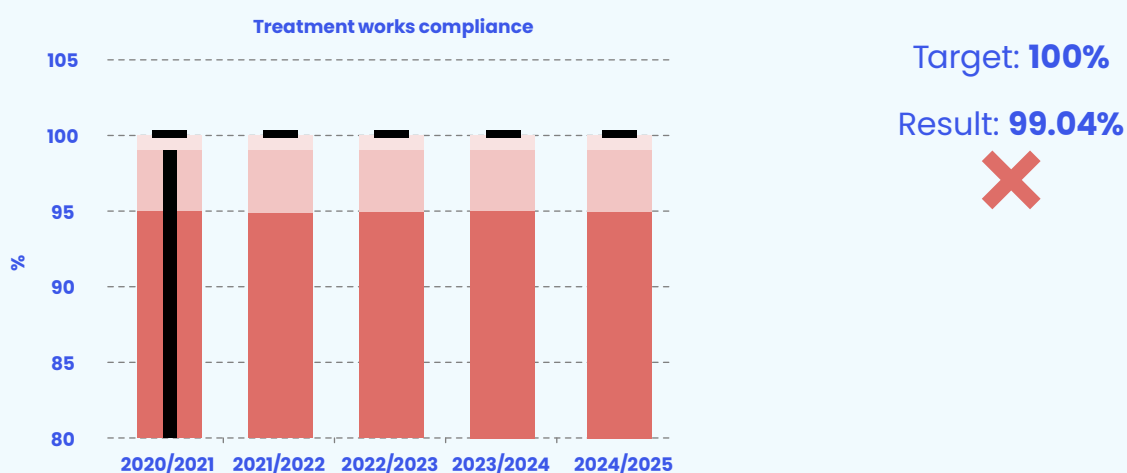
Sewer collapses is a common performance commitment with a new definition that all companies across the industry are reporting against. To allow for comparative reporting it is really important that we are transparent on our compliance with the reporting definition. Our external auditors, Atkins, have made suggestions where the methodology can be improved. Reporting Guidance states that 'this measure should include all public sewer and lateral collapses recorded by the company inclusive of those incidents that have been reported as flooding or pollution failures, if the primary cause of the flooding or pollution was a sewer collapse'. Overall, Atkins' have assessed this as amber, meaning an incomplete data set or minor errors identified that do not alter the performance reported relative to targets and threshold values. As a result, we are undertaking a process improvement activity to address the issues raised and ensure a cross checking to flooding and pollution incidents can be evidenced in future reporting.

In July 2021, we reported a value of 15.10 for this performance commitment. At the time of publication, we noted that there was a potential gap in reconciling flooding and pollution events and therefore we had less confidence in this original submitted value. We have since completed our analysis of any data that may have been missing from this original reported value. As part of this analysis, we reviewed in detail an additional 552 incidents and identified an additional 30 collapses that should have been reported. We have taken this change through additional assurance. As a result, we are restating our performance against this commitment from 15.10 to 15.67 sewer collapses per 1,000km of sewer.

## Treatment works compliance

Information type	What we mean by this
<b>Definition</b>	Treatment works compliance is defined in the reporting guidance for PR19 – Water & Sewerage Company Environmental Performance Assessment (EPA) Methodology (version 3). Published November 2017 by the Environment Agency.  The discharge permit compliance metric is reported as the number of failing sites (as a percentage of the total number of discharges) and not the number of failing discharges.
<b>Additional information</b>	A discharge can be confirmed as failing for a number of breaches of a numeric permit at wastewater treatment works and water treatment works.
<b>Okay, so what does that actually mean?</b>	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. This is a calendar year measure from January to December.
<b>Unit</b>	Percentage compliance to two decimal places.
<b>Measurement timing</b>	Calendar year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

### Performance chart – higher is better



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

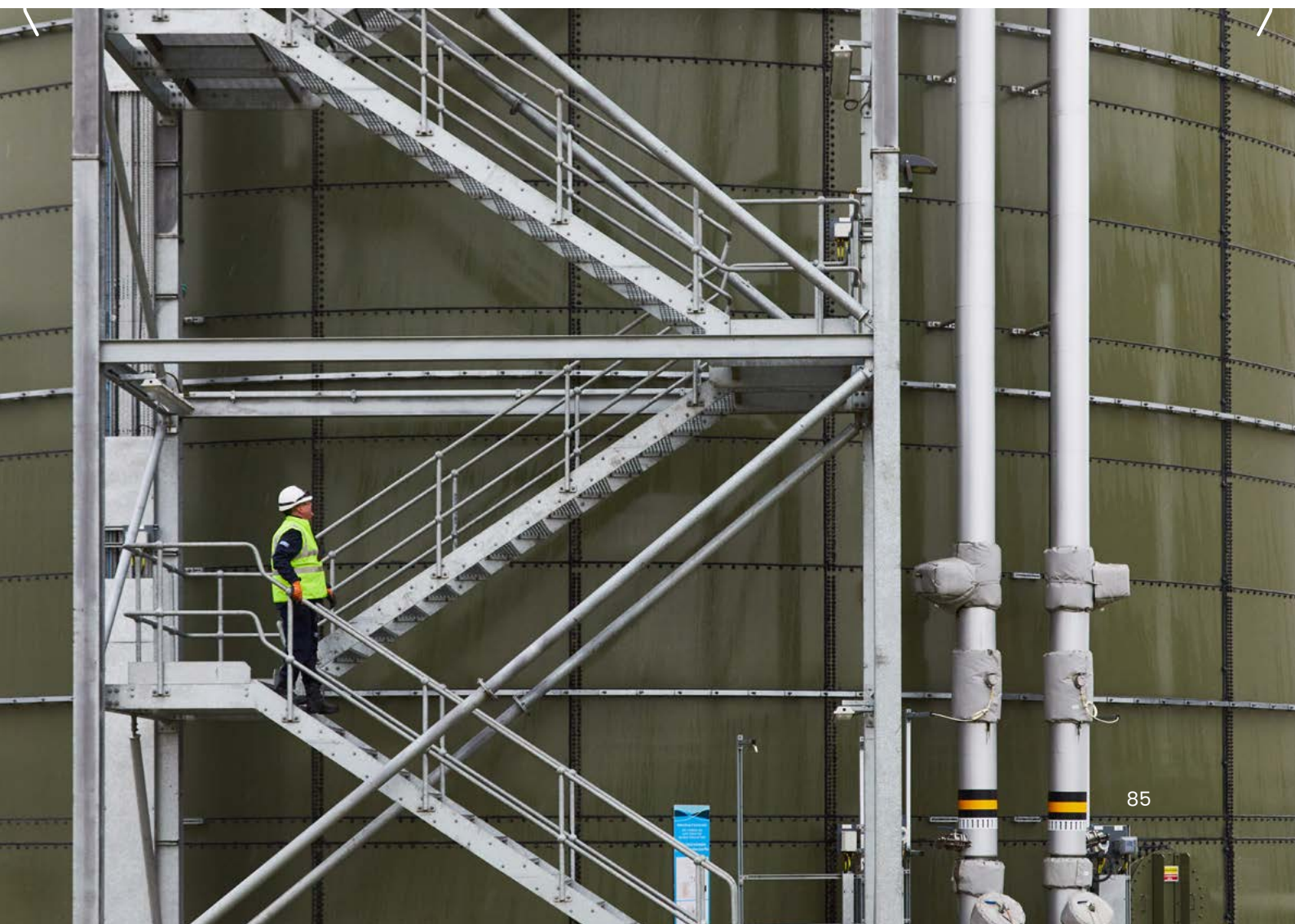
We treat and supply around 1.3 billion litres of drinking water each day by operating and maintaining our water treatment works and distribution network. We've achieved over 99% compliance which is our best ever performance against the set of measures within this commitment. Three of our 608 wastewater treatment works didn't meet their numeric discharge permit conditions in 2020/2021 resulting in 99% compliance. It's our continued aim to achieve high levels of performance and drive towards 100% compliance.

The failing works were Stanley, Malton and Rawcliffe York Sewage Treatment Works.

At Stanley, the failing sample was due to an unforeseen issue with an operational task relating to changing duties on the final settlement tanks.

At Rawcliffe, a programmable logic controller (PLC) failure following a power issue led to the site return sludge system not operating which led to loss of solids from the final settlement tanks.

At Malton, the site has struggled to achieve Ammonia removal targets during colder months for the last couple of years and some samples exceeded their target during the year.





## C-MeX

Information type	What we mean by this
<b>Definition</b>	The customer measure of experience (C-MeX) is a measure of customer satisfaction. A company's C-MeX score is calculated as the weighted average of customer satisfaction (CSAT) scores from customer service (CS) and customer experience (CE) surveys.
<b>Additional information</b>	<p>The C-MeX score (determined before the application of any adjustment for the number of channels offered) is calculated using the following formula:</p> $\text{C-MeX score} = 50\% * \text{CS} - \text{CSAT} + \text{CE-CSAT}$ <p>Each CSAT score is rescaled to be out of 100. Three points are deducted from the C-MeX score if we don't offer at least five communication channels, including three online channels, to receive contacts from customers.</p>
<b>Okay, so what does that actually mean?</b>	C-MeX measures how satisfied our household customers are. We're ranked against the other water companies. First is the top spot and 17th is last place.
<b>Unit</b>	Score out of 100 to two decimal places
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

Result: **82.78**



### Performance summary

The Customer Measure of Experience (C-MeX) is calculated using the scores from two surveys: a Customer Service Survey of customers who have had a recent interaction with Yorkshire Water (split into those who've had a billing, water, or wastewater query); and a Customer Experience Survey of any Yorkshire resident regardless of whether they've had a recent interaction with Yorkshire Water. Customers are asked to provide a score out of 10 for their satisfaction with Yorkshire Water, and the scores are combined to provide a score out of 100. Our customers can contact us about our service in several different ways. These include post, email, telephone, social media, webform, short message service (SMS) or in person.

For 2020/2021, our overall C-MeX score was of 82.78 out of 100, resulting in a ranking position of eighth out of 17 companies. For 2020/2021, our Customer Service Survey score was 80.24 (ninth out of 17 companies), and our Customer Experience Survey score was 85.33 (sixth out of 17 companies).

We maintained a robust performance on the Customer Experience Survey score throughout the year. This is a measure of perception and through analysing our customer responses we know it can be driven by many factors including bill prices, water quality, previous interactions or simply satisfaction at not having had any need to contact us. We continue to develop our understanding of these drivers and focus on the role that brand and communication activity plays in driving the perception of Yorkshire Water.

## D-MeX

Information type	What we mean by this
<b>Definition</b>	<p>D-MeX is a measure of customer satisfaction. Our overall D-MeX score is calculated from two components that contribute equally:</p> <ol style="list-style-type: none"> <li>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</li> <li>2. a quantitative D-MeX score, based on our performance against a set of selected Water UK performance metrics throughout the reporting year.</li> </ol> <p>The survey results which are used to calculate the qualitative component of the company's D-MeX score will be supplied by a survey agent appointed by Ofwat. This is supplied out of 100 to form the score for the qualitative component of D-MeX.</p> <p>The set of Water UK performance metrics, which are used to calculate the quantitative component of the D-MeX score, are set out in annex 2 of 'PR19 final determinations: Customer measure of experience (C-MeX) and developer services measure of experience (D-MeX) policy appendix'. For each metric, a percentage is reported and an average of these metrics is taken. This is rescaled as a measure out of 100 to form the score for the quantitative component of D-MeX.</p>
<b>Additional information</b>	<p>The company's D-MeX score is calculated using the following formula:  <math display="block">\text{D-MeX score} = 50\% * \text{Qual} + 50\% * \text{Quant}</math>           where:</p> <ul style="list-style-type: none"> <li>- 'Qual' is a simple average of satisfaction scores given by developer customers surveyed in the developer customer satisfaction survey in the reporting year; and</li> <li>- 'Quant' is a simple average of the selected Water UK performance metrics which have non-zero volumes in the reporting year.</li> </ul>
<b>Okay, so what does that actually mean?</b>	<p>D-MeX measures how satisfied our developer services customers are. We're ranked against the other water companies. First is the top spot and 17th is last place.</p>
<b>Unit</b>	Score out of 100 to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

Result: **62.25**



### Performance summary

The qualitative measure of this is taken from the D-MeX customer satisfaction survey and the quantitative measure is based on our performance against common Water UK performance metrics. These metrics measure the practical service levels we provide to our developer services customers including the timeliness of the work carried out. Our score for D-MeX is 62.25. We recognise that we need to improve in this area, and we've already embarked on a long-term transformation plan.

# 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.**

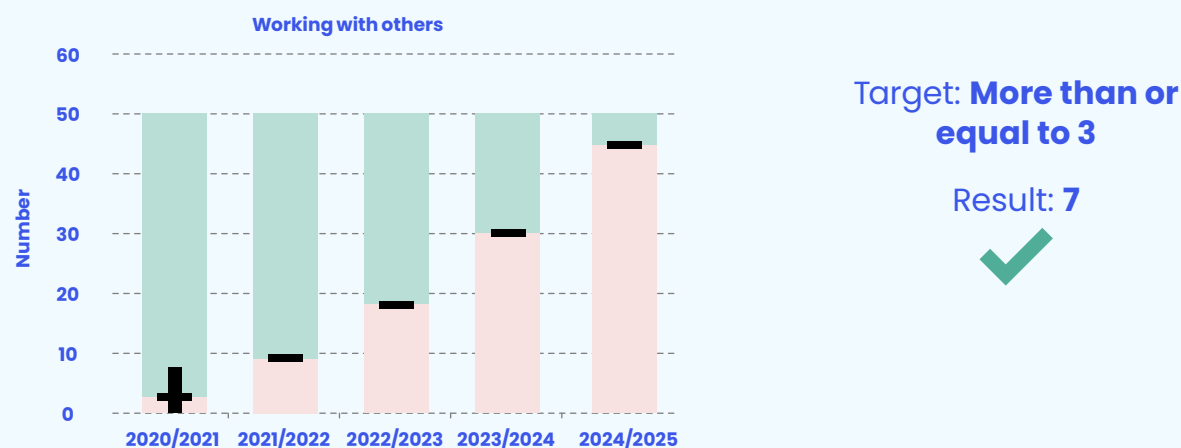
To respond to our customers' feedback, we developed a package of 29 performance commitments that are unique for Yorkshire Water. They align with our ambitions and challenge us to change the way we work to meet both customers' expectations and the complex long-term challenges that we'll face as a business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

Information type	What we mean by this
<b>Definition</b>	This measure is the cumulative number of partnership projects we deliver in partnership with independent agencies, organisations or individuals in the 2020–2025 period. Projects are activities where we contribute to direct financial or in-kind support, capital or operational programmes, investigations, and feasibility studies or investigations. Partnerships are defined as projects where we engage in activity with independent not-for-profit third-party organisations, agencies or individuals for the delivery of a shared objective. 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 cost benefit to help meet our business objectives and customer outcomes will be selected.
<b>Additional information</b>	<p>For the purposes of this performance commitment ‘benefits’ are considered as partnership projects that:</p> <ul style="list-style-type: none"> <li>• enable delivery of a much larger/wider schemes than if we act in isolation;</li> <li>• save money, including avoided operational costs;</li> <li>• provide additional benefits such as recreational or biodiversity benefits;</li> <li>• enable access to specialist technical expertise, such as local charities/ volunteers;</li> <li>• remove surface water from the our network; and</li> <li>• with our involvement would leverage additional funding (for example by demonstrating match funding for bids).</li> </ul>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of projects we deliver in partnership with other people, organisations or independent agencies.
<b>Unit</b>	Number of projects reported to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	<p>Outperformance payments</p> <p>The outperformance payment will not exceed 50% of the additional benefits delivered to customers through partnership working.</p>
<b>Timing of underperformance and outperformance payments</b>	End of period

## Performance chart – higher is better



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

Our target from 2015–2020, was to deliver 17 projects in partnership with others. We delivered 43 projects with more than 50 other organisations which helped to reduce flood risk, enhance biodiversity, and improve the accessibility of our recreational sites, amongst other benefits.

Our target for this performance commitment for the whole of AMP7 is to deliver 45 projects and, despite the challenges that COVID-19 has presented to partnership working, we have started strongly on achieving our ambitious target.

This year we've delivered seven projects in partnership with others, contributing £1.15m. These funds have gone towards projects which assess bathing water quality, improve fish passage, clear drainage ditches, share our telemetry data, and understand how best to engage with customers around flood resilience and rain water harvesting.

In order to count towards this performance commitment, each project that we have claimed must meet the eligibility criteria as defined in Appendix 1. Yorkshire Water has presented all of the projects being claimed to the Yorkshire Forum for Water Customers (the Forum), who are an independent group of customer and stakeholder representatives that meet on a regular basis to review and challenge Yorkshire Water's performance. The working with others performance commitment is one area that the Forum have identified as being of high priority and high interest to them. The Forum has confirmed that it has been assured by the processes in place and has agreed with the eligibility criteria presented.

There's a strong pipeline of projects for the coming years and we expect to meet the target, and possibly outperform it. Key areas of the business which identify and deliver partnership projects include our work on recreation and access, our activity in Hull and Haltemprice and Biodiversity Enhancement Fund projects. We also expect to deliver some surface water separation schemes with local authorities.

# Working with others

## Performance Commitment Eligibility Criteria

### 1. Identify a partnership project

#### Partnerships are defined as:

projects where the company engages in activity with independent not for profit third-party organisations, agencies or individuals for the delivery of a shared objective

#### Project is defined as:

activities where the company contributes to direct financial or in-kind support, capital or operational programmes, investigations, and feasibility studies or investigations

#### Included projects:

- partnerships and projects may be established to test or trial a concept or technique. If, in the event the test or trial is unsuccessful, the project can still be claimed provided the company can demonstrate that substantive benefits have been delivered.
- can claim individual partnership projects that are part of a broader partnership as long as they are self-contained projects with their own distinct goals and benefits. i.e. projects within a programme.

#### Projects excluded:

- the company's own research and development activity;
- business as usual delivery of capital projects by contractors; and
- repair and maintenance or other framework contracts.
- projects that deliver benefits taken into account for the PR19YKY\_2 Land conserved and enhanced performance commitment.

### 2. Partnership projects must have benefits

#### Benefits can include but are not limited to the following:

- enable delivery of a much larger/wider schemes than if the company acts in isolation;
- save money, including avoided operational costs;
- provide additional benefits such as recreational or biodiversity benefits;
- enable access to specialist technical expertise, such as local charities /volunteers;
- remove surface water from the company's network; and
- with the company's involvement would leverage additional funding (for example by demonstrating match funding for bids)

#### Additional benefits:

- protecting or enhancing raw water quality
- managing the risk of sewer escapes, for example by removing surface water from our network
- promoting water efficiency and responsible use of sewers
- protecting our assets or services from flooding, or coastal erosion
- projects which increase the diversity of visitors to the countryside particularly at Yorkshire Water locations
- projects which focus on visits to the countryside and other nature-based activities which support the health and welfare of individuals
- projects that protect or enhance the natural environment
- projects that build community resilience

### 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 cost benefit to help meet the company's business objectives and customer outcomes will be selected.
- 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 2020–21 reporting year and will be published in the company's Annual Performance Report (APR). The Yorkshire Forum for Water Customers will provide assurance it 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 2024-25 performance commitment level. Any outperformance payments will be calculated and applied based on the cumulative total in 2024-25.

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.

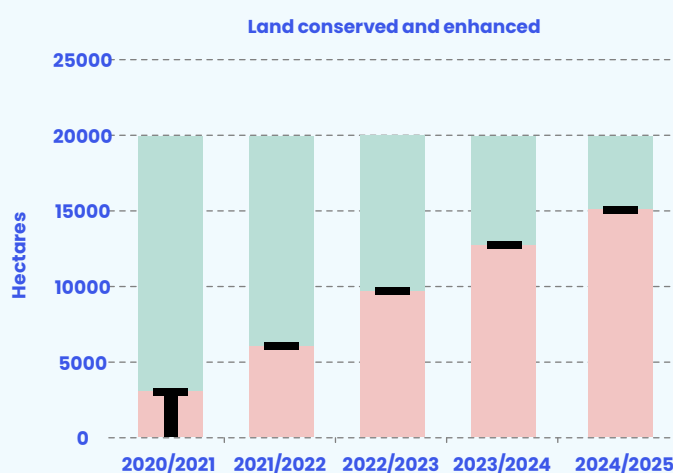
The company will maintain documented reports that set out the benefits delivered from each partnership project and how these have been determined.



## Land conserved and enhanced

Information type	What we mean by this
<b>Definition</b>	<p>The cumulative area of land conserved and enhanced in our region through land management and biodiversity focused projects and investments on land owned, and not owned, by Yorkshire Water in the 2020–2025 period. The performance commitment includes the following statutory programmes:</p> <ul style="list-style-type: none"> <li>• Site of Special Scientific Interest (SSSI) programme;</li> <li>• Local Wildlife Sites or similar, programme;</li> <li>• Other schemes benefitting biodiversity (for example, delivering best practice land management schemes); and</li> <li>• 'Beyond Nature' land management.</li> </ul> <p>The performance commitment covers our legal obligations and will also deliver additional environmental benefits.</p>
<b>Additional information</b>	Where there's no defined hectarage for a project, the area of land claimed will be based on professional judgement of the functional ecosystems benefitting from the intervention and agreed with Natural England and/or the Environment Agency as appropriate. Natural England is the body responsible for determining the condition of the SSSIs.
<b>Okay, so what does that actually mean?</b>	This measures the area of land conserved and enhanced in our region. We do this through land management and biodiversity focused projects and investments.
<b>Unit</b>	Number of hectares to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments only for 2024/2025.
<b>Timing of underperformance and outperformance payments</b>	End of period

### Performance chart – higher is better



Target: **More than or equal to 3,048 hectares**

Result: **3,084 hectares**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

We're pleased that we've exceeded our target to conserve and enhance 3,048 hectares of land with a reported figure of 3,084 hectares in 2020/2021. This performance commitment is made up for four elements, SSSI, Beyond Nature, Local Wildlife Sites and Biodiversity.

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 already included in the SSSI part of this performance commitment. The overlap is estimated to be 6,265 hectares but this will not be counted under the Beyond Nature reporting, to prevent double counting. Our target for Beyond Nature excluding the SSSI areas, is 3,735 hectares. In year one, we have claimed 3,084 hectares of Beyond Nature.

Work has also started on our Local Wildlife Site programme against the 125 ha target. We've 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 delivered at Rodley nature reserve and Boltby reservoir, and works have started at Timble Ings through a successful water vole reintroduction.

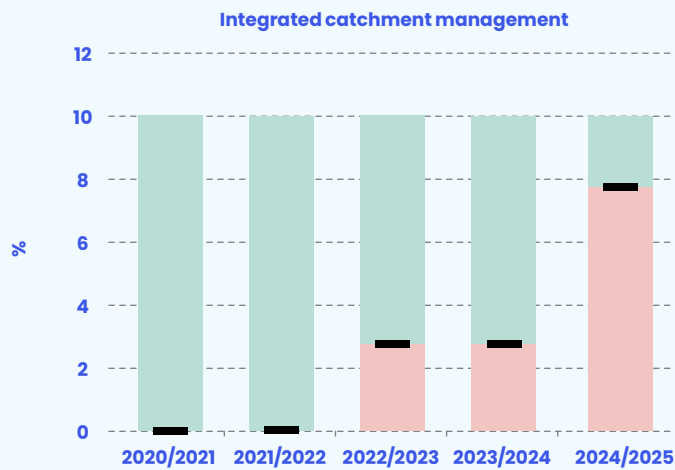
We've started work on 24 biodiversity schemes that will help us deliver the 40 hectares target for this work stream. Examples include:

- Supporting the Yorkshire Wildlife Trust and Natural England in re-meandering sections of the Driffeld Trout Stream, one of the most northerly chalk streams in the country
- Alongside Northumbrian Water, playing our part in helping deliver the National Lottery Heritage Funded Tees – Swale Naturally Connected Partnership to deliver large scale habitat restoration across over 800 km<sup>2</sup> 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.

# Integrated catchment management

Information type	What we mean by this
<b>Definition</b>	<p>The cumulative percentage of catchments in which Yorkshire Water operates where, working with stakeholders, we will implement the 'Natural Capital Operator' approach in the 2020–2025 period. Implementation of the approach requires that a Natural Capital Operator based management plan is formally developed, agreed, and relevant actions are implemented. The Natural Capital Operator Model is a model where a Systems Operator provides a central oversight and management function, to both ensure optimal and sustainable use and management of natural capital, and to coordinate investment and management decisions.</p> <p>Catchments will be selected based on where we can demonstrate that:</p> <ul style="list-style-type: none"> <li>• we have an operational presence within the catchment (for example, water abstraction or wastewater processing);</li> <li>• there will be a clear benefit for customers by implementing this process; and</li> <li>• there is adequate opportunity to gather the required information to drive change.</li> </ul>
<b>Additional information</b>	<p>For the purpose of this programme, catchments are constrained to the operational catchments in which Yorkshire Water operates and has a dominant presence. It includes the 39 operational catchments present across Yorkshire: within the Derwent Humber (4), Hull and East Riding (6), Esk and Coast (3), Swale Ure Nidd and Ouse (10), Wharfe &amp; Lower Ouse (4), Aire and Calder (7) and Don and Rother (5).</p> <p>'Catchment management' is defined as the cost-effective practical delivery of on the ground interventions, resulting in multiple benefits including improvements to water quality, enhanced biodiversity, reduced flood risk, resilience to climate change and greater community engagement with their local river.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the percentage of our catchments where the 'Natural Capital Operator' approach has been implemented.
<b>Unit</b>	Percentage of catchments to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

## Performance chart – higher is better



Target: **More than or equal to 0.0%**

Result: **0.0%**



See page 57 of this report for an explanation of what this chart shows and the key.

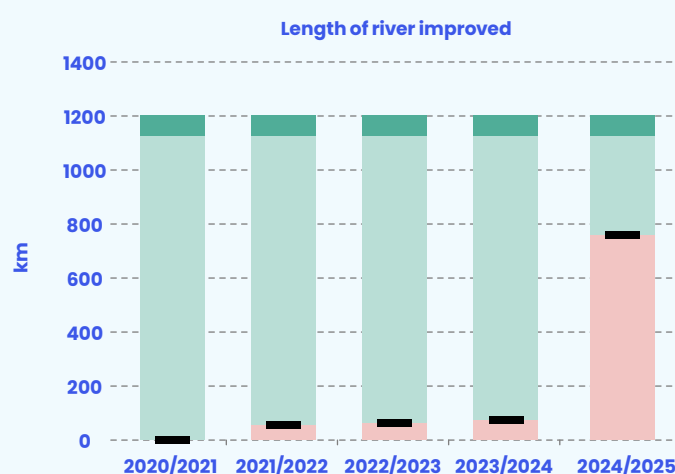
## Performance summary

For this performance commitment, we need to produce three catchment plans that would assist in the prioritisation of investment and activities across drinking water catchments. There were no plans intended for 2020/2021, but work has progressed on identifying the catchments to be worked upon in the next four years and setting up the framework within which the performance commitment will be delivered.

## Length of river improved

Information type	What we mean by this
<b>Definition</b>	The cumulative length of river improved as a consequence of regulatory and legislative drivers in the 2020–2025 period. Length of river improvements will be determined through a number of processes depending on whether the improvement is a result of clean water or wastewater obligations.
<b>Additional information</b>	This performance commitment includes schemes which were designated Green and Amber as at 1 April 2019 by the Environment Agency. The performance commitment excludes kilometres of river improved outside the Yorkshire region.
<b>Okay, so what does that actually mean?</b>	We're working hard to improve river water quality and this performance commitment measures the length of river we've improved each year, from 2020 to 2025.
<b>Unit</b>	Kilometres of river to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments and outperformance payments only for 2024/2025. Outperformance only applies to non-WINEP schemes.
<b>Timing of underperformance and outperformance payments</b>	End of period

### Performance chart – higher is better



Target: **More than or equal to 0.0 km**

Result: **0.0 km**



### Performance summary

River improvement is an on-going project, and because we're still in the early stages of this project, our target for this year is zero. The majority of our river length improvements have now started, and we expect to achieve our targets in each of the individual years up to 2024/2025.

There are 92 individual obligations which deliver this performance commitment across AMP7 and we have a delivery plan and review group to ensure that these are achieved. The majority of river length projects are now raised and have started to be delivered.

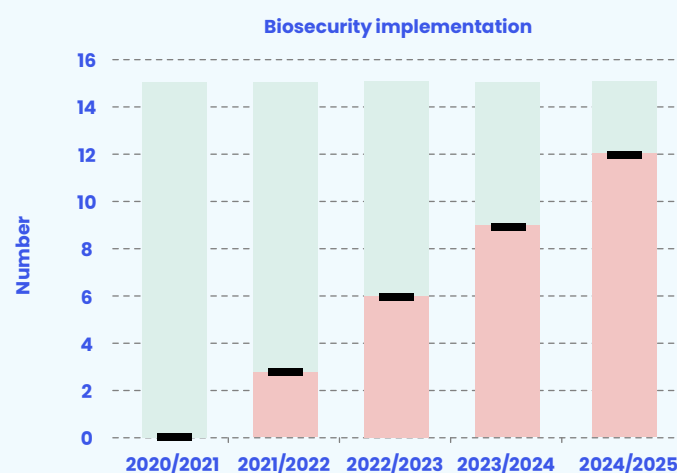
The impact of any future COVID-19 lockdowns could lead to delivery issues, but we've determined a way of working which functions under lockdown, and the Environment Agency have shown an understanding of these issues in terms of date extensions.

See page 57 of this report for an explanation of what this chart shows and the key.

# Biosecurity implementation

Information type	What we mean by this
<b>Definition</b>	The cumulative number of pathways of invasive species spread, where our biosecurity interventions have reduced the risk of that spread in the 2020–2025 period. Biosecurity encompasses reasonable and practicable measures to prevent the spread of harmful organisms, such as plants, animals, fungi or pathogens. We will implement biosecurity measures through pathway management plans.
<b>Additional information</b>	<p>To confirm that biosecurity has reduced the risk of spread of invasive non-native species (INNS) via a pathway, the following process will be followed:</p> <ol style="list-style-type: none"> <li>1. Each Pathway Management Plan will have specified success measures against each action point which will be independently reviewed and agreed with the Environment Agency.</li> <li>2. The Pathway Management Plan can only be considered completed once all action points have been implemented and signed off by the relevant regulators and a competent third-party assurer.</li> <li>3. In addition to the success measure, there will be an evaluation of the engagement, learning and behavioural change across the business, which can be used to inform future policies across various sectors of the organisation.</li> </ol>
<b>Okay, so what does that actually mean?</b>	As part of a national drive to reduce the spread of non-native invasive species, this performance commitment looks at our biosecurity interventions that have reduced the risk of that spread.
<b>Unit</b>	Number of pathways to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

## Performance chart – higher is better



Target: **More than or equal to 0**

Result: **0**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

There are twelve main ways 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. Over the course of AMP7, we'll be putting in place measures across twelve pathways to reduce the risk of their spread.

We have a target of putting all relevant actions in place on three pathways a year from 2021/2022 to 2024/2025. This means that we don't have to complete any in 2020/2021 and so are reporting zero for this year.

We've been working with our wastewater team to understand where invasive species may be introduced or spread in the wastewater treatment process and how likely and severe this may be. We've identified measures that can be implemented to prevent this process from moving invasive species around. We've been working closely with the Great Britain Non-Native Species Secretariat and other water companies, to develop industry wide training to help support the implementation of appropriate levels of biosecurity.



# Operational Carbon

Information type	What we mean by this
<b>Definition</b>	The percentage reduction in real terms of net operational carbon equivalent emissions from a 2019/2020 baseline. The scope of the measure includes any greenhouse gas emissions emitted due to the operational activities, such as, but not limited to, grid electricity consumption, fuel consumption, and process emissions from sludge, wastewater and water treatment.
<b>Additional information</b>	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 etc. It also makes updates in relation to new reporting requirements or improvements in science each year.
<b>Okay, so what does that actually mean?</b>	As part of our drive to reduce carbon emissions, this performance commitment measures the drop in net operational carbon equivalent emissions compared to our performance in 2019/2020. 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. We report our progress in tonnes of carbon dioxide equivalent emissions, with the lower the number recorded, the better.
<b>Unit</b>	Percentage reduction to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – higher is better



Target: **More than or equal to 2.4%**

Result: **3.6%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

Operational carbon emissions arise from the use of fuels in our transport fleet, natural gas used in our offices and process emissions arising directly from our operations to supply and treat water. All emissions are expressed in terms of tonnes CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) which is a standardised measure to compare all greenhouse gases. These emissions don't include electricity consumption because we either generate our own electricity, or buy from certified renewable generation, so we're already 'zero carbon'. We monitor and measure our carbon footprint which is checked by independent experts to ensure accuracy to internationally recognised standards, we also use an industry standard tool to report our emissions to ensure comparability and transparency.

Our performance each year is measured against a baseline year of 2019/2020 (91,259 tCO<sub>2</sub>e) and we have a target to reduce our emissions by a minimum of 2.4% per annum. This is the first year of reporting against the baseline and our verified emissions for 2020/2021 were 87,948 tCO<sub>2</sub>e. We're pleased that we've beaten our target and reduced emissions by 3.6%.

Several factors have impacted our emissions and there's a complex interaction between water consumption, operational activities, weather, carbon reduction projects and COVID-19. COVID-19 has reduced our transport emissions and lower occupancy in our offices saw a reduction in emissions from heating. We have a strong carbon reduction programme that also identifies and supports carbon reduction across the business including our operational activities, which has contributed to this year's improved performance.

In our original APR submission in July 2021, we reported a figure of 5.2% against this performance commitment. This has now been updated to 3.6%. This change follows a query we received from our Regulator, Ofwat, on the version of the 'Carbon Accounting Workbook' we used to calculate this figure. We sought to follow global standards and report the most accurate baseline available and reported using version 15 of the Carbon Accounting Workbook. However, to ensure comparison of performance across the industry, we should have used version 13 of the workbook. The data has been updated and reflects a change in how emissions are calculated in the two different workbooks rather than a change or deterioration in performance. This updated value now allows for comparison across the industry.

# Capital Carbon and carbon arising from owned land

Information type	What we mean by this
<b>Definition</b>	<p>Percentage reduction in capital carbon emissions from the delivery of our capital investment programme and carbon emissions arising from land that we own. The measure will cover two areas of our carbon footprint:</p> <ol style="list-style-type: none"> <li>1. 2020–2025 business plan emissions – the carbon that results from our investments to maintain and enhance its water and wastewater assets.</li> <li>2. Land emissions – the net balance of the carbon emissions that are sequestered (meaning absorbed and locked away) from our land or released from our land.</li> </ol>
<b>Additional information</b>	<p>The measure calculates the percentage difference between the expected capital carbon and land emissions compared to a carbon baseline for these components.</p> <p>For embedded emissions, we'll include the emissions on every capital investment in our 2020–2025 asset management plan. We will only include emissions reductions resulting from changes in activities and materials we drive ourselves.</p> <p>We'll exclude human activities on land that we own, such as a farmer's property and use of fuels in their vehicles and equipment.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the drop in carbon emissions from the delivery of our capital investment programme and the carbon emissions that come from land we own.
<b>Unit</b>	Percentage reduction to one decimal place.
<b>Measurement timing</b>	Calendar year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

Target: **Measured in year 5**

Result: **71%** 

## Performance summary

To measure our performance for capital carbon, we compare our actual emissions to a baseline, and we've promised to achieve a 23% reduction by 2025. Our baseline for year one is 202,465 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e). We make checks monthly to ensure we are on track.

We've successfully completed our external verification of our carbon accounting approach and taken on board the recommendations to improve. These improvements will be built into our system to fully embed low carbon thinking into our capital projects and solutions. We're currently on track to meet our AMP7 target of a 23% reduction in embedded carbon.

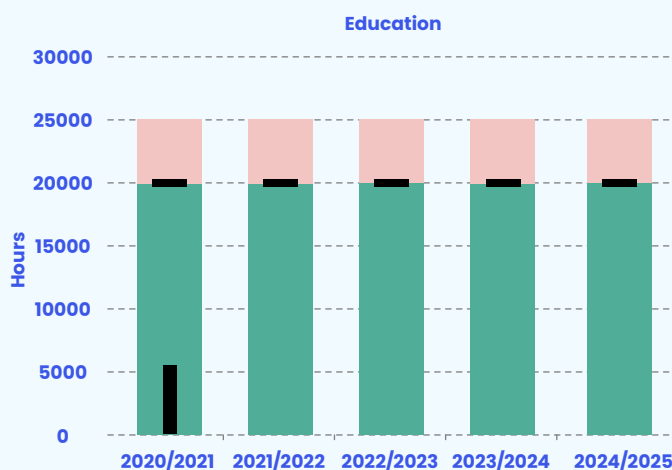
In 2020/2021, our processes and approach have been certified to a global standard by an independent third party. PAS2080 is a global standard for managing these emissions and ensures we are delivering high quality carbon reduction activities across Yorkshire Water.

To achieve this standard, we have conducted a validation of our systems which has highlighted areas of improvement that we will work on over the next year, and we will continue to improve our systems. We will also conduct an audit each year to ensure accuracy in our data.

## Education

Information type	What we mean by this
<b>Definition</b>	<p>This commitment measures the number of learning hours that we provide to raise understanding of the value of water.</p> <p>Education activity will be delivered through a combination of lessons, workshops, talks and school assemblies. The content will focus on raising awareness of the value of water, understanding water/wastewater treatment processes, and educating about how customers can use water and sewerage systems wisely.</p> <p>The education programme will include regional and community-targeted campaigns as well as more detailed and practical education at our specialist education centres. Customers receiving education will include children (all ages), special interest adult groups as well as the wider customer base.</p>
<b>Additional information</b>	<p>We'll measure the total number of hours delivered through face-to-face educational visits and programmes. The total number of hours of education will be calculated from the total number of people directly engaged with, multiplied by the hours of engagement, for each visit or programme. This will be measured to the nearest hour.</p>
<b>Okay, so what does that actually mean?</b>	<p>This performance commitment measures the number of learning hours that we provide through lessons, workshops, talks, school assemblies and much more.</p>
<b>Unit</b>	Number of hours to zero decimal places reduction to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

### Performance chart – higher is better



Target: **More than or equal to 20,000 hours**

Result: **5,590 hours**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

The challenges of the COVID-19 pandemic meant that we made the difficult decision to close our education centres to protect our operational teams. However, during the year we delivered a range of innovative programmes, reaching over 6,600 young people and customers, but due to several factors outside our control, we were unable to meet the target for this year.

During 2020/2021 we delivered over 30,000 hours of education. The majority of this learning was delivered via social media channels, through our series of mini films.

A total of 7,067 learning hours was delivered through face-to-face or virtual teaching. Of these hours, due to the COVID-19 situation we were only able to obtain individual feedback for 5,590 of the learning hours we delivered.

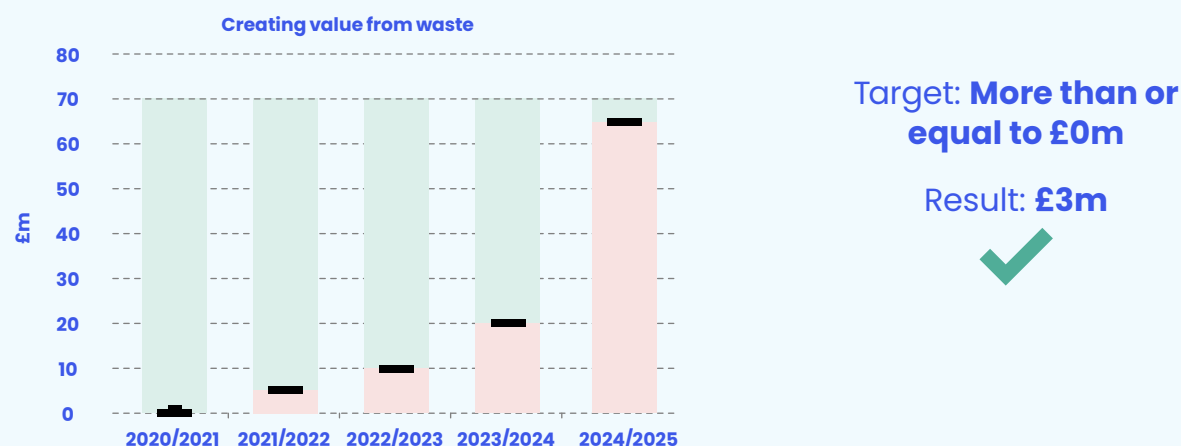
Our Education Team has worked hard during the pandemic, but ultimately, trying to deliver education during a pandemic is challenging. The additional requirement for individual feedback has made the task more difficult. We'll aim to meet the target for the next financial year, but are reliant on COVID-19 remaining stable, schools being fully functional and our education centres reopening.



# Creating value from waste

Information type	What we mean by this
<b>Definition</b>	The cumulative additional environmental, social and financial benefit, monetised (£), that we create from resources currently under-used or classified as waste in the 2020–2025 period.
<b>Additional information</b>	<p>We'll increase the value realised from resource streams that currently exist in our business, the wastes included within this performance commitment are:</p> <ul style="list-style-type: none"> <li>• Grit and screenings – these enter and accumulate in the sewer network or arrive and accumulate at the wastewater treatment works (tonnes).</li> <li>• Fats, oils and greases (FOG) – these enter and accumulate in the sewer network or arrive and accumulate at the wastewater treatment works (tonnes).</li> <li>• Water and wastewater sludges (including potential calorific, mineral and nutrient value) – these are produced through the water and wastewater treatment processes. There are also sludge lagoons, a legacy of historic operational practices (tonnes).</li> <li>• Heat lost to the natural environment – from sewage and from water and wastewater treatment plants, including energy generation assets (kWh).</li> <li>• Construction, repair and maintenance waste – these activities produce a range of under-used materials including, for example, excavation materials and redundant kit from sites (tonnes).</li> <li>• Land – this includes areas of operational sites that are not currently needed, or not expected to be needed in the foreseeable future, for operational purposes (hectares). It also includes company catchment land where further value can be taken by increasing recreation and environmental improvements.</li> </ul> <p>The benefits will be quantified in terms of the Six Capitals value created: natural, social, financial, intellectual, human and manufactured.</p>
<b>Okay, so what does that actually mean?</b>	In our drive to reduce waste and recycle everything we can, this performance commitment measures the extra environmental, social and financial benefit (in £m) we create from our resources that are under-used or classed as waste.
<b>Unit</b>	Millions of pounds to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

## Performance chart – higher is better



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

We're pleased that we've exceeded our target of £0m for this year with a reported performance figure of £3m. This value was generated from a series of initiatives, including a new innovation partnership to reduce the cost of wastewater sludge treatment, and income from the sale of non-operational company land.

The total value generated came from the following initiatives:

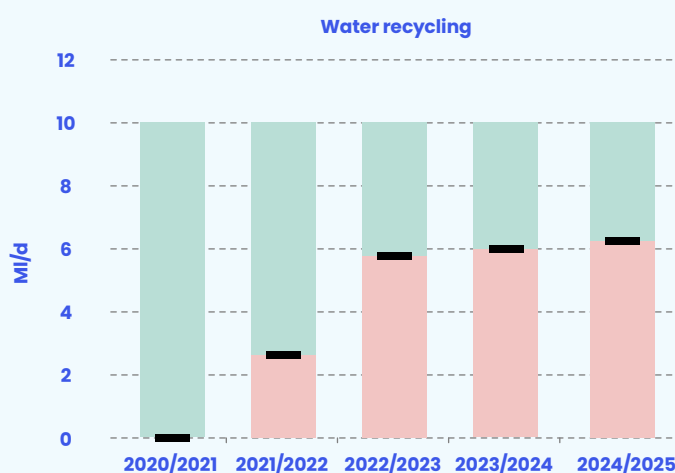
1. A new innovation partnership with the University of York, where we've identified a safe way of treating a trade wastewater sludge stream using our in-house anaerobic digesters. This means we no longer need to pay for the sludge to be taken away and treated off-site by a third-party, which has saved £1.4m in costs.
2. A new treatment capacity to deliver in-house treatment of sludges. Until recently, wastewater sludges from our treatment plant at Selby were limed and sent off-site for disposal by a third-party. The opening of our new anaerobic digestion facility at Dewsbury in 2020 added new treatment capacity, resulting in a saving of £0.06m.
3. The sale of several parcels of spare company land during 2020/2021 to generate income and remove the risk of future expenditure liabilities. The value generated by these sales was £1.0m.



# Water recycling

Information type	What we mean by this
<b>Definition</b>	The volume of water recycled in our clean and wastewater treatment sites, reducing the volume of water abstracted from the environment.
<b>Additional information</b>	<p>This performance commitment covers:</p> <ul style="list-style-type: none"> <li>the re-use of process water in our clean and wastewater treatment sites; and</li> <li>the use of final effluent from our wastewater treatment sites for commercial applications.</li> </ul> <p>Each site for which a recycled water volume is claimed is to be itemised individually and the volume evidenced with measured data. The performance commitment will only apply to positive changes made by the company from 1 April 2020.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the volume of water we recycle in megalitres per day (Ml/d).
<b>Unit</b>	Megalitres per day (Ml/d) to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – higher is better



Target: **More than or equal to 0.00 Ml/d**

Result: **0.00 Ml/d**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

Following Ofwat's 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

Information type	What we mean by this
<b>Definition</b>	<p>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 for are affordable to you?”</p> <p>The possible responses will be:</p> <ul style="list-style-type: none"> <li>• strongly agree</li> <li>• tend to agree</li> <li>• neither agree nor disagree</li> <li>• tend to disagree</li> <li>• strongly disagree</li> <li>• don't know</li> </ul> <p>‘Strongly agree’ and ‘tend to agree’ will be considered positive responses. The number of positive responses will be expressed as a percentage of overall responses.</p>
<b>Additional information</b>	<p>The question is asked in a Consumer Council for Water (CCWater) annual survey known as Water Matters. The commitment will be measured annually and reported after the reporting year when results are published by CCWater. This is normally in June or July.</p>
<b>Okay, so what does that actually mean?</b>	<p>We want to make sure our customers get value for money, so this performance commitment measures the percentage of customers who think their water bill is affordable.</p>
<b>Unit</b>	Percentage of customers to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

Target: **More than or equal to 81%**

Result: **82%** 

## Performance summary

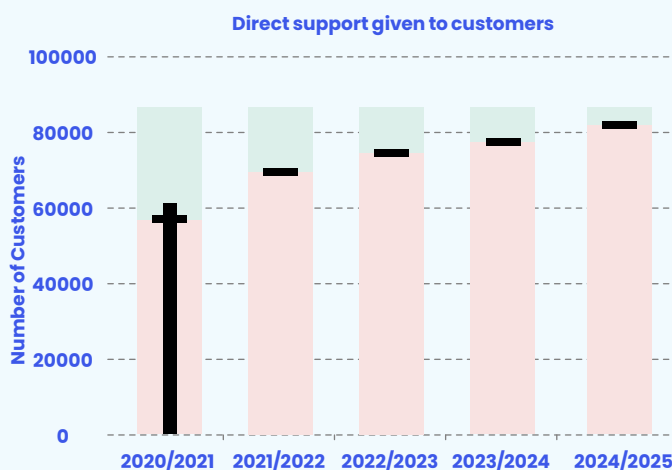
The 2020/2021 research undertaken by CCWater and published in its Water Matters report shows that 82% of customers are positively satisfied that their water and sewerage charges are affordable. We're pleased to report that this is above the target of 81% for this performance commitment.

Due to the impact of the COVID-19 pandemic increasing the amount of time our customers have spent at home and the government advice to keep washing hands, we've seen a jump in water consumption which has had an impact on measured customers' bills.

## Direct support given to customers

Information type	What we mean by this
<b>Definition</b>	<p>The number of residential customers who receive financial support through one of our approved schemes each year.</p> <p>Any residential customer registered for financial support for any duration will be included in the total. This includes customers who're no longer customers, for example, people who registered for the scheme during the reporting year but who have subsequently moved home outside the region during the reporting year.</p>
<b>Additional information</b>	<p>The schemes promoted by Yorkshire Water, or those operated and promoted via partner agencies are:</p> <ul style="list-style-type: none"> <li>• Watersure;</li> <li>• WaterSupport;</li> <li>• Temporary Help;</li> <li>• Resolve;</li> <li>• Community Trust;</li> <li>• Fresh Start; and</li> <li>• Domestic meter option for those in debt.</li> </ul> <p>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.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures how many household customers get financial support from one of our direct support schemes each year.
<b>Unit</b>	Number of customers to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

### Performance chart – higher is better



Target: **More than or equal to 58,000**

Result: **61,406**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

We're pleased to say that we've significantly overachieved on this performance commitment by helping more customers than ever before. Our target was met primarily through growth in our social tariff (WaterSupport). We achieved this by making improvements to the application process and carrying out proactive customer engagement making it easier for customers to apply. We've also implemented a new support scheme, Direct Support, for customers to pay through benefit deductions.

The number of customers we've supported has increased on a yearly basis. This year, the number of customers we've helped has increased by over 70%, with an additional 25,000 customers above last years total, being helped. This has taken the total number of customers to over 61,000.

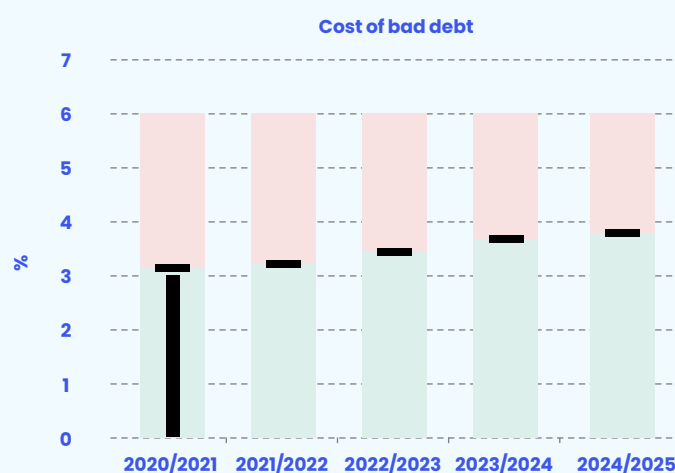
The comparative growth from last year represents the promotional activity we've undertaken to raise awareness of the affordability support available; this includes building on our community engagement function. This activity aims to be proactive in reaching under-represented customer groups that need financial support with their water bill.



## Cost of bad debt

Information type	What we mean by this
<b>Definition</b>	The cost of unrecovered residential customers' bills ('bad debt') to all customers, expressed as a proportion of the average annual bill. This performance commitment relates to the percentage of residential customers' bills that results from bad debt. The commitment measures the cost of interest on revenues not collected, debt written off and debt management costs incurred, expressed as a percentage of the average annual water and sewerage bill for residential customers.
<b>Additional information</b>	Useful definitions: <b>Cost of interest</b> The monetary value derived from the interest weighted cost of capital of the residential revenue uncollected during the report year. <b>Revenue outstanding</b> The uncollected charges billed to customers during the report year. <b>Debt management costs</b> The operational expenditure associated with debt collection related activity.
<b>Okay, so what does that actually mean?</b>	This performance commitment shows how much bad debt costs our bill-paying customers. This cost covers interest on revenue that's not collected, debt written off and debt management costs. The cost of bad debt is shown as a percentage of the average annual household bill.
<b>Unit</b>	Percentage of the average annual residential bill, measured to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

### Performance chart – lower is better



Target: **Less than or equal to 3.23%**

Result: **3.00%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

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.

One of our performance commitments is to make sure the cost to customers of our bad debt is kept at no more than 3.23% of the average bill. In the year we've maintained our leading approach to managing debt, and the cost to our customers being 3.00% of the average bill in 2020/2021.

Our bad debt performance commitment is the cost of debt per customer expressed as a percentage of the average household water and sewerage bill. The bad debt performance commitment target was set at 3.23% of the average household water and sewerage bill for the first year of AMP7. The outturn for 2020/2021 is an outperformance of 0.23% and reduction of 0.06% compared to 2019/2020.





# Priority services awareness

Information type	What we mean by this
<b>Definition</b>	<p>The percentage of household customers who state, when questioned, that they're aware of the additional services offered by the Priority Services Register (PSR). The PSR is a water and energy industry term for free services provided to customers in vulnerable circumstances. We consider that a customer is vulnerable when circumstances, temporary or permanent, impede their ability to access or benefit from its services. This is typically due to their physical or mental health, life stage, language or financial situation. Services within the PSR include:</p> <ul style="list-style-type: none"> <li>• Braille bills;</li> <li>• Braille information;</li> <li>• card warnings;</li> <li>• CD bills;</li> <li>• priority supply connection;</li> <li>• help for customers who use home dialysis;</li> <li>• large print bills;</li> <li>• large print information;</li> <li>• delivery of bottled water in a water supply incident;</li> <li>• nominated person to handle the customer's account;</li> <li>• password on accounts;</li> <li>• meter readings;</li> <li>• talking bill;</li> <li>• text telephone contact; and</li> <li>• visit in person.</li> </ul>
<b>Additional information</b>	<p>Awareness will be measured through a Consumer Council for Water (CCWater) commissioned survey. The Water Matters survey covers household water bill payers in England and Wales. The respondents are responsible, either solely or jointly, for paying their household's water bill.</p>
<b>Okay, so what does that actually mean?</b>	<p>We want to make sure our customers know this extra help is available, so this performance commitment measures the percentage of household customers who are aware of our Priority Services Register.</p>
<b>Unit</b>	Percentage of customers to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

Target: **More than or equal to 50%**

Result: **43%** 

## Performance summary

We're pleased to report a priority awareness result of 43% which has increased from last year, but unfortunately we didn't meet our ambitious target of 50%.

Given the dip in performance last year, we've been testing how we can better engage with our customers around the priority services. We've trialled different types of messaging and imagery to see what works best with our customers.

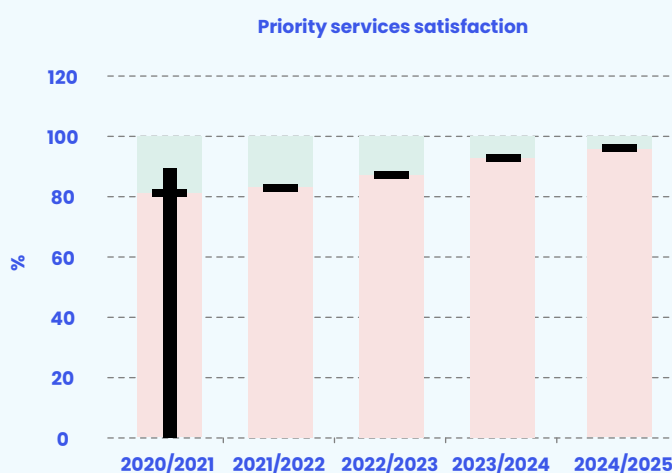
This year we've partnered with seven charities in a paid partnership approach to increasing awareness and sign up for specific types of needs. We'll continue to test this approach and use the insight from this to improve on our approach.

Next year in addition to our existing communication plan, our colleagues will be engaging directly with customers to let them know about the priority services that we offer. We're hoping this initiative will help us achieve our target next year.

## Priority services satisfaction

Information type	What we mean by this
<b>Definition</b>	<p>The percentage of residential customers on the Priority Services Register who are satisfied with their experience of the Priority Services Register. This is taken to be the percentage of residential customers on the Priority Service Register who, when questioned, agree that they are satisfied with the Priority Service Register.</p> <p>The commitment will be measured monthly through a customer survey. The monthly responses will be totalled annually on 31 March.</p> <p>At the end of the reporting year, we'll calculate the percentage of respondents who responded positively to the question, "How much do you agree with the following statement? I am satisfied with my experience of the Priority Service Register?" The possible responses will be:</p> <ul style="list-style-type: none"> <li>• strongly agree;</li> <li>• somewhat agree;</li> <li>• neither agree nor disagree;</li> <li>• somewhat disagree; and</li> <li>• strongly disagree.</li> </ul> <p>'Strongly agree' and 'somewhat agree' will be considered positive responses.</p>
<b>Additional information</b>	The question will be asked to a minimum of 600 customers annually, as part of a monthly customer survey. The survey will be administered by telephone, unless additional accessibility options are required under the Priority Services Register requirements.
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the percentage of household customers on the register who are satisfied with our service.
<b>Unit</b>	Percentage of respondents giving a positive response to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

### Performance chart – higher is better



Target: **More than or equal to 82%**

Result: **91%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

Our priority services allow customers to inform us about their circumstances so that we can support them. This may include Braille bills or bottled water delivery in instances where supply is affected.

It's important that we understand how well we meet the needs of customers on our Priority Services Register, and we're seeking to understand this for a specific group of customers beyond our general satisfaction and experience surveys.

We ask customers specifically about how easy it was for them to get the support they needed and if our services have met their needs. This performance commitment gives us direct feedback from customers in order for us to improve how we can support them.

We've seen a significant increase in our satisfaction over the last year. We're pleased to report that we exceeded our target of 82% with a score of 91%.

We've improved the information we provide to our customers, we've provided more training for colleagues and collected additional information regarding their specific needs as soon as possible during their interactions with us. Our customers have fed back to us that recognising their circumstances and showing empathy are very important to them alongside the services they receive.

We found that several customers struggled to answer the question on the survey that provided the overall score.

The main survey reporting question was tested alongside two other versions to understand if we could improve customer response to the survey. We changed the question to:

**Based on your priority services needs how satisfied are you with Yorkshire Water's service?**

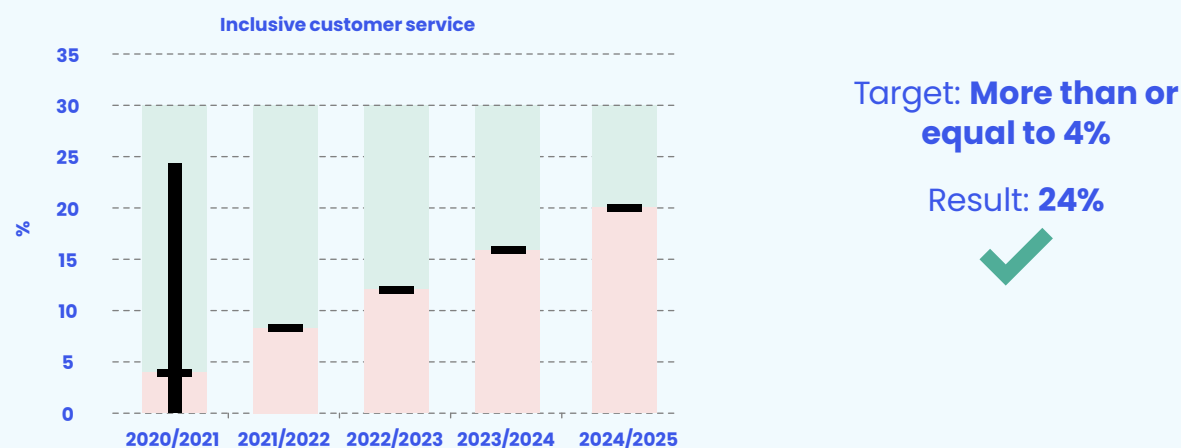
Please use a scale of 1 to 5 where 5 is equal to very satisfied, 4 to quite satisfied, 3 to neither satisfied nor dissatisfied, 2 to quite dissatisfied and 1 to very dissatisfied?

This question was selected as the scoring question because it allowed the customers a better opportunity to give us clear feedback on their service. Only 3% of customers were unable to answer this question compared to 13% unable to answer the original question.

# Inclusive customer service

Information type	What we mean by this
<b>Definition</b>	<p>The improvement in the services provided to customers in circumstances that make them vulnerable, specifically those on our Priority Services Register (PSR).</p> <p>This performance commitment will be reviewed and assessed by an independent panel of third-party organisations and charities. There will also be in place an external assurance provider to quality assure the entire process, including all material provided to undertake the review, and will extend to providing the panel members with support with assessing, reviewing and evaluating our performance. The review will cover three criteria:</p> <ul style="list-style-type: none"> <li>• the accessibility of service provision;</li> <li>• the types of services provided; and</li> <li>• the effectiveness of services provided.</li> </ul> <p>Each of the three criteria will be scored by individual organisations based on a scale of one to five (one=low competence, little evidence of performance; five=highly competent, strong evidence of performance). A 'criterion average score' (total score for each criterion divided by the number of organisations) will be obtained from the results.</p> <p>The overall score will be the average score across all criteria (i.e. the sum of all the scores divided by the number of scores).</p>
<b>Additional information</b>	<p>The panel will conduct the formal review annually, with a final review undertaken in 2025 for the purpose of measuring against the performance commitment. The charities and organisations to be chosen will be based on the following criteria:</p> <ul style="list-style-type: none"> <li>• representatives of those areas where the company has low uptake on the PSR;</li> <li>• those that reflect PSR groups where our customer awareness and satisfaction is lowest (obtained from internal PSR awareness figures and satisfaction of the PSR data); and</li> <li>• those that reflect significant sized groups in the Yorkshire Water area which it has had less engagement with.</li> </ul>
<b>Okay, so what does that actually mean?</b>	To make sure we keep improving, this performance commitment measures the percentage of improvement in the services we offer to our vulnerable customers.
<b>Unit</b>	Percentage improvement to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

## Performance chart – higher is better



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

The 15 organisations who have taken part in the review of our performance includes charities working with the elderly, those representing customers with serious and chronic health conditions, and specific communication needs, people living in rural areas and people from BAME backgrounds. We make sure that an independent research agency conducts our review with these organisations to maintain our independence from the process.

Our measure of inclusive customer service has improved by 24% from last year's baseline score of 3.21. This shows the impact of significant improvements in the service we offer and deliver.

We made this progress by focusing on several specific areas which positively impacted our customers. This included adding language translation services to our toolkit of resources which is in addition to the British Sign Language interpretation that we have offered for over a year.

Another area of focus has been the information we provide about our priority services via our website and through our communications with our customers. We've improved access to the specific areas of our website and provided specific messaging about the priority services we offer.

We'll continue to use the insight gathered to make improvements for these customers.

## Gap sites

Information type	What we mean by this
<b>Definition</b>	<p>The number of gap sites identified and added to the billing system within 12 months of identification as a percent of the number of gap sites identified and added to the billing system within 12 months of identification plus the number of gap sites that have been identified and have not been billed within 12 months.</p> <p>Gap sites identified less than 12 months before the reporting year end but not billed at the end of the reporting period aren't counted in the performance data for that year.</p> <p>The number of gap sites that have been identified and remain unbilled after 12 months includes any gap sites identified in preceding years which haven't yet been added to the billing system (including those identified after 31 March 2019).</p>
<b>Additional information</b>	<p>Gap sites will be identified if brought to our attention through external means such as customer contacts or by identification internally by us such as through assessment of billing data and other external data sources.</p> <p>A gap site is defined as a property connected for water services that is not known to us and therefore not billed. The performance commitment will be expressed as the number of residential gap sites brought into charge.</p>
<b>Okay, so what does that actually mean?</b>	<p>A gap site is a property that isn't on our billing records and doesn't receive a water bill at the moment. This performance commitment measures the gap sites identified and billed in the last 12 months as a percentage of the total number of gap sites identified.</p>
<b>Unit</b>	Percentage to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance only
<b>Timing of underperformance and outperformance payments</b>	In-period

Target: **More than or equal to 80%**

Result: **19%** 

## Performance summary

This year we're reporting a figure of 19% against our target of 80% for our gap sites performance commitment. There were 17 gaps sites that became voids and 169 gap sites that have now been billed. After receiving guidance from our auditors, to comply fully with the written definition (specifically exclusions) within the final determination, we've used a methodology which only includes gap sites that are illegal connections validated by our Developer Services Team.

Our intention when developing this performance commitment was to address the efficiency of ensuring any connected properties benefitting from our service, but missing from our billing file, are put on our billing system. This would include accounts waiting to be added to our billing system from various different methods of identification, including through our new connections process. Using this methodology would've resulted in a figure of 58% being reported.

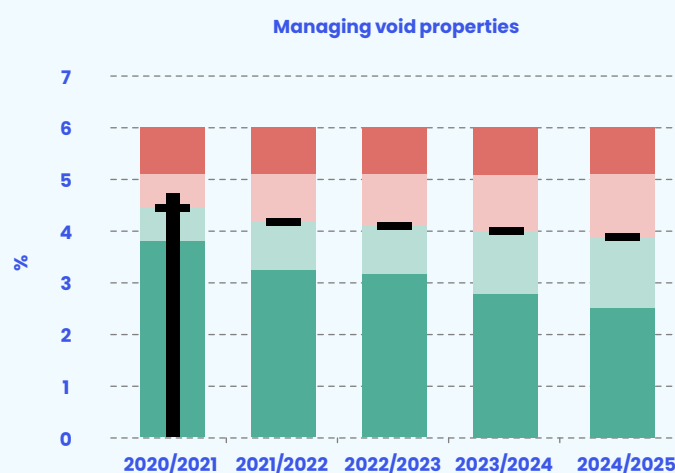




## Managing void properties

Information type	What we mean by this
<b>Definition</b>	The number of household properties classified as void as a percentage of the total number of household properties served by Yorkshire Water. Void properties are defined as properties, within our supply area, which are connected for either a water service only, a wastewater service only or both services but don't receive a charge, as there are no occupants. Additionally, a property connected for both services that is unoccupied, only counts as one void property.
<b>Additional information</b>	Excludes non-household properties. The proportion of void properties will be measured as an average over the year. The same method to calculate the average will be used each year.
<b>Okay, so what does that actually mean?</b>	Void properties are buildings that we believe are empty and we don't bill them, so it's important our records are up to date. This performance commitment measures the number of void household properties as a percentage of the total number of household properties served.
<b>Unit</b>	Percentage of household properties classed as void, reported to two decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

### Performance chart – lower is better



Target: **Less than or equal to 4.50%**

Result: **4.73%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

A delay in implementation of improvement activities due to restrictions imposed by the Government in response to the COVID-19 pandemic has meant that we didn't achieve our target for this performance commitment. Our performance has improved significantly throughout the second half of the year and we ended the year in a better position. We've made a number of improvements such as increasing how often we carry out checks on our data and we've increased the number of field visits on void properties.

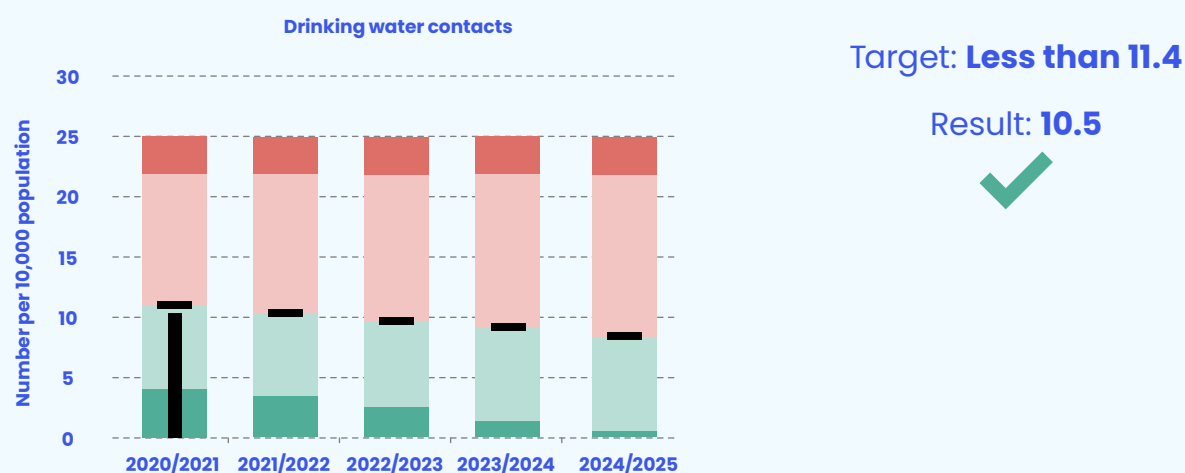
We expect to meet or exceed the regulatory year 2 target of 4.33%. A consolidated recovery plan is in place for 2021/2022. Learnings from performance excellence initiatives (particularly in respect of customer service) will be carried forward to the planned initiatives to be undertaken in year 2 of the AMP to make sure we achieve our target.



# Drinking water contacts

Information type	What we mean by this
<b>Definition</b>	<p>The number of times we're 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.</p> <p>The calculation is the number of contacts for appearance plus all taste/ odour contacts multiplied by 10,000, divided by the resident population as reported to the Drinking Water Inspectorate (DWI).</p>
<b>Additional information</b>	<p>The consumer contact classification guidance is defined by the DWI in Information Letter 1/2006, 6 January 2006, at</p> <p>Only consumer contacts that are about appearance, taste and odours will be included in this measure.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of times our customers contact us each year because of issues with the look, taste, or smell of their water. This measure is the number of contacts per 10,000 people.
<b>Unit</b>	Number of consumer contacts per 10,000 population, reported to one decimal place.
<b>Measurement timing</b>	Calendar year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

Drinking water contacts in 2020 continued the long-term trend of a year-on-year reduction in contacts. In 2020, we achieved an outcome of 10.5 contacts per 10,000 population which was better than our performance commitment target of 11.4 per 10,000 in 2019.

Our improved performance has been achieved through specific long-term projects including work to remove historic sediment build up within our water mains. The most significant cause of the improvement since 2015 has been the long-term commitment to local area flushing. The flushing activity removes historic sediment which reduces the opportunity for this sediment to be disturbed in normal operation and cause discolouration of supply to customers.

There were 459 fewer contacts related to discolouration in 2020 compared to 2019. Year-on-year we are seeing fewer customers impacted by discolouration, which is great news and is helping us meet our performance commitment. There was also a decrease of 235 'appearance' contacts and a small decrease of 56 'taste and odour' contacts in 2020 compared to 2019.

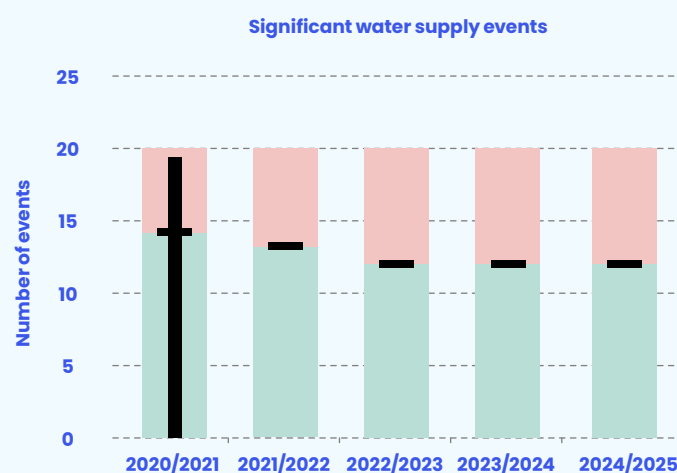
The target for this measure reduces every year for the next four years and we plan to improve our performance further.



# Significant water supply events

Information type	What we mean by this
<b>Definition</b>	The number of supply interruption events lasting for a duration of 12 hours or longer, irrespective of whether it's planned, unplanned or caused by a third party. A water supply interruption event starts when water is no longer available at the first tap, whether a residential or business property. The duration of a supply interruption is determined by the time taken between the initial notification of the interruption and the time of the restoration of supply. One or more properties must experience a supply interruption of 12 hours or longer to count as an event for measurement in the performance commitment.
<b>Additional information</b>	<p>An event is defined as an interruption to one or more properties. An event is both spatially and temporarily variable. As such, based on the location and time of notifications, an event will be classified by the following two conditions:</p> <ol style="list-style-type: none"> <li>1. All notifications received downstream of the point of interruption, will be considered as one event.</li> <li>2. Notifications received between the time of the first notification and the time of resolution of the interruption for that notified area, will be considered as one event, if the notifications are also within the same area of the network, as described in condition one.</li> </ol>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of water supply interruptions that last 12 hours or longer. This number includes supply interruptions that are planned, unplanned or caused by a third party.
<b>Unit</b>	Number of events where one or more properties has an interruption of 12 hours or longer.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **Less than or equal to 14 events**

Result: **19 events**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

We're disappointed to report that we had 19 significant water supply events against a target of 14 in 2020/2021. Performance against the target has been challenging due to the increased levels of network failure; in particular over the prolonged cold weather we experienced in January 2021.

In October 2020, we saw our largest rise in significant water events with an increase of four events, due to three complex long running water supply interruptions and a planned water mains repair where the planned mitigation to maintain water supplies to customers during the repair failed.

Although we've missed our target this year, we're implementing corrective measures to make improvements in our performance over the next five years.

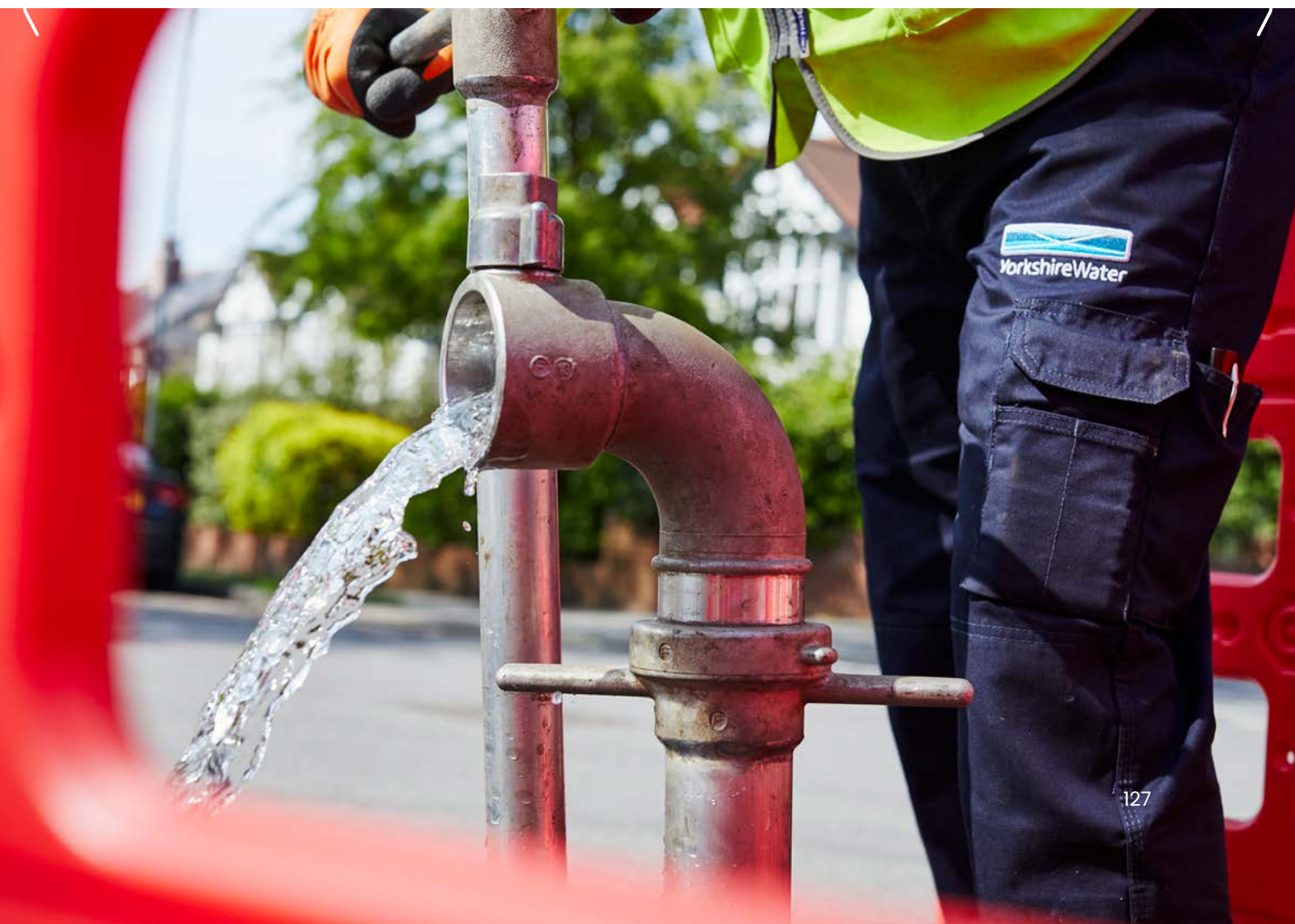
### Additional information

Within the Final Determination, the interruption duration is defined as: 'the time taken between the initial notification of the interruption to the restoration of supply'. The Final Determination also says:

'The notification of an event is determined by the time that: logged data showing a discernible difference in pressure or flow; the time of the first customer call notifying us of a supply interruption where this is a result of our asset; and/or time works starts, as recorded.'

For this performance commitment, the initial notification is taken as the time we are first made aware of the interruption, utilising the earliest of any of the above data, and the calculation of the duration of the event is taken as starting from this time and ends when we are satisfied that water supplies have been restored to affected properties.

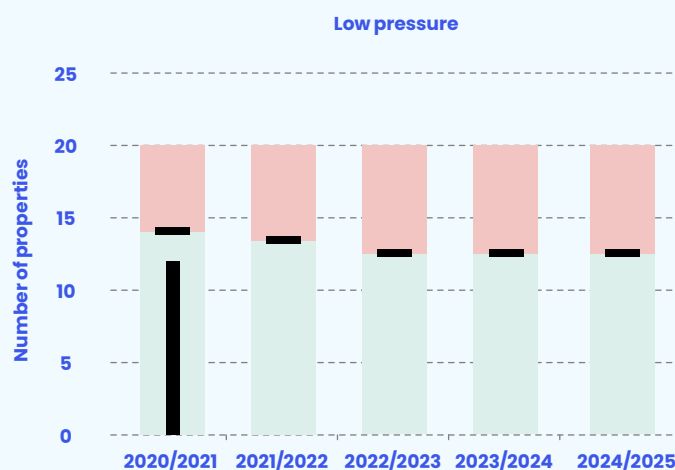
This is different to the common water supply interruptions performance commitment reporting methodology, where the start time is confirmed using retrospective information in the hydraulic review process that may not have been available on the day. Therefore, an event could have a common water supply interruptions performance commitment duration of 12 hours but not be classed as a significant event as we were not notified of the event until 2 hours into the interruption duration.



## Low pressure

Information type	What we mean by this
<b>Definition</b>	The number of properties receiving or at risk of receiving pressure below the low-pressure reference level. This measure is calculated as the total number of properties receiving pressure below standard, minus the number of those properties that are covered by the predetermined allowable exclusion categories as detailed in the reporting guidance. Low pressure reference level is defined in the reporting guidance published 11 December, 2017 'Properties at risk of receiving low pressure':
<b>Additional information</b>	The low-pressure reference level applies to a single property and is measured on the customer's side of any meter or our fittings.
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of properties getting, or at risk of getting, water pressure below the low-pressure reference level. The low-pressure reference level is a minimum standard set by our regulator, Ofwat.
<b>Unit</b>	Number of properties to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

### Performance chart – lower is better



Target: **Less than or equal to 14 properties**

Result: **12 properties**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

Our target was to finish the year with no more than 14 properties experiencing water pressure that is lower than the regulatory standard. We're pleased to report that we ended the year with only 12 properties receiving inadequate levels of pressure.

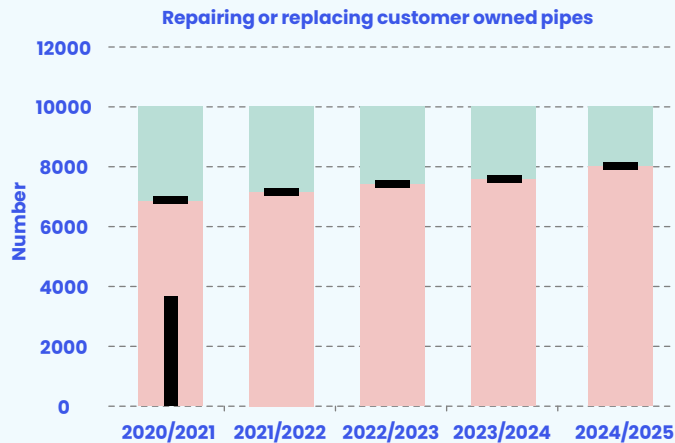
We know that the target for this performance commitment becomes more challenging each year, so we are reviewing our plans and resources to ensure that we are well placed to achieve the more challenging future targets.



# Repairing or replacing customer owned pipes

Information type	What we mean by this
<b>Definition</b>	The number of residential supply pipe repairs and renewals carried out by us each year for no charge. Where a supply pipe leak on a residential property is having a detrimental impact on our water network, we can intervene using our statutory powers as defined in Sections 73-75 of the Water Industry Act 1991. This allows us to isolate the water supply and/or locate and repair the leak within the boundary of the residential property.
<b>Additional information</b>	<p>While all repairs or replacements carried out on customer supply pipes will be measured within the performance commitment, the following exclusions will not be eligible for the supply pipe repair service and therefore not included within this performance commitment.</p> <ul style="list-style-type: none"> <li>• Business properties that receive a bill for water services from a retailer, including Yorkshire Water Business Services.</li> <li>• 'New build' residential properties less than two years old.</li> <li>• Residential properties with internal leaks. This is where the company identifies that a leak is inside the property, or at point of entry to the property, or within the cavity wall.</li> <li>• Supply pipes under residential properties. Where the company identifies that, the leak is under a structure, such as a kitchen extension or garage.</li> <li>• Third party damage where the company identifies that the leak has been caused by accidental, reckless or deliberate damage to the supply pipe.</li> </ul>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the number of household supply pipe repairs and renewals we carry out each year for no charge.
<b>Unit</b>	Number of residential supply pipe repairs and renewals carried out by the company each year to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – higher is better



Target: **More than or equal to 6,882**

Result: **3,850**



See page 57 of this report for an explanation of what this chart shows and the key.

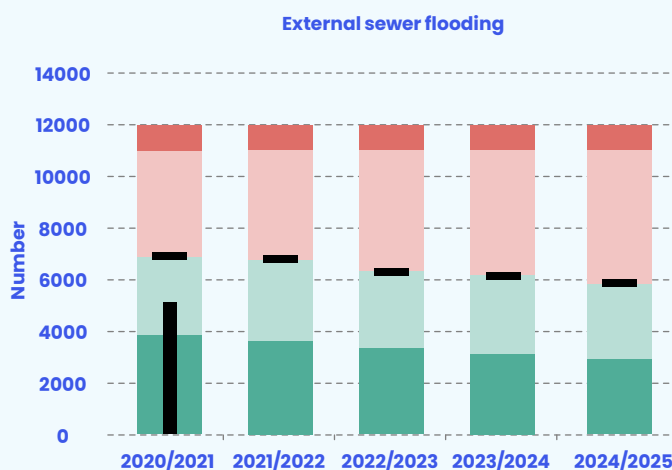
## Performance summary

We aimed to repair or replace 6,882 pipes that are owned by our customers. We're disappointed to report that we repaired 3,850 pipes this year which is less than we had planned. This was partly due to a slow start thanks to the COVID-19 restrictions put in place by the Government. This has led to the Company only entering the boundary of a customer's property in the event of an emergency for a period of time. This impacted on our ability to meet the target, but we're hopeful that it will be achieved next year.

# External sewer flooding

Information type	What we mean by this
<b>Definition</b>	<p>The external sewer flooding measure is defined in the reporting guidance for PR19 – Sewer Flooding, updated on 28 April 2018</p> <p>The performance commitment will be reported as the absolute number of external sewer flooding incidents per year including incidents caused by severe weather.</p>
<b>Additional information</b>	<p>Some useful definitions:</p> <p><b>External flooding:</b> is defined as flooding within the curtilage of a building normally used for residential, public, community or business purposes.</p> <p><b>Flooding event:</b> is defined as the escape of water from a sewerage system, irrespective of size as evidenced by standing water, running water or visible deposits of silt or sewage solids. It includes flooding due to overloaded sewers (hydraulic flooding) and due to other causes (FOC).</p> <p><b>Number of incidents:</b> is defined as the number of curtilages flooded during each flooding event from a public sewer including incidents on sewers transferred under the Transfer of Private Sewers Regulations 2011 and pumping stations transferred in 2016.</p> <p><b>Severe weather:</b> is defined as individual rainfall events with a storm return period greater than 1-in-20 years. Flooding incidents caused by severe weather should be included in this measure.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the total number of external sewer flooding events through the year.
<b>Unit</b>	Number of incidents to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – lower is better



Target: **Less than or equal to 7,188**

Result: **5,038**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

We know that sewer flooding of homes and gardens is one of the worst things our customers can experience from our activities and we continue to work hard to prevent this happening. In 2020/2021, we've met our commitment for external sewer flooding. We continue to play our part in managing flood risk by providing a public drainage network and collaborating with other flood management agencies to support a joined-up approach to both short-term incidents and long-term plans.

We've invested significantly to transform our approach to sewer flooding at every stage in the incident process.

We've worked to enhance the service provided to customers and improve performance during the first year of the AMP. There will be further improvements delivered throughout the AMP to make sure the performance improvements are sustained and built upon.

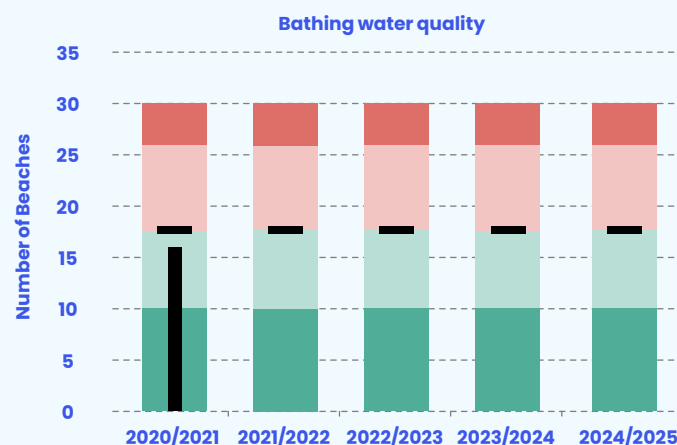
We expect to continue to meet the target for this performance commitment.



# Bathing water quality

Information type	What we mean by this
<b>Definition</b>	<p>The performance commitment is to measure the number of designated bathing waters which exceed the European Union Bathing Water Directive requirements in the 2020–2025 period, as reported by Defra.</p> <p>The 19 designated bathing waters in our region are:</p> <ol style="list-style-type: none"> <li>1. Bridlington North Beach;</li> <li>2. Bridlington South Beach;</li> <li>3. Cayton Bay;</li> <li>4. Danes Dyke;</li> <li>5. Filey;</li> <li>6. Flamborough South Landing;</li> <li>7. Fraisthorpe;</li> <li>8. Hornsea;</li> <li>9. Reighton;</li> <li>10. Robin Hoods Bay;</li> <li>11. Runswick Bay;</li> <li>12. Sandsend;</li> <li>13. Scarborough North Bay;</li> <li>14. Scarborough South Bay;</li> <li>15. Skipsea;</li> <li>16. Tunstall;</li> <li>17. Whitby;</li> <li>18. Wilsthorpe; and</li> <li>19. Withernsea.</li> </ol>
<b>Additional information</b>	<p>The bathing water quality assessment and classification is as described in the UK Bathing Water Regulations SI 2008 as in effect at the time of PR19 final determination publication (BWR) and is based on bathing water quality data compiled during the previous four bathing seasons. Before the bathing season begins, Defra publishes a report summarising the results of the bathing season, along with the cumulative four-year average.</p> <p>This confirms the bathing water quality standard for each of the Company's designated bathing beaches, giving it an annual target position for this performance commitment.</p>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures how many of our bathing waters meet or exceed the European Union Bathing Water Directive water quality requirements.
<b>Unit</b>	Number of beaches to zero decimal places.
<b>Measurement timing</b>	Calendar year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Outperformance and underperformance payments.
<b>Timing of underperformance and outperformance payments</b>	In-period

## Performance chart – higher is better



Target: **More than or equal to 18**

Result: **16**

See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

Our bathing water performance commitment is to achieve 18 of 19 designated bathing waters at 'good' or 'excellent' status as reported by DEFRA under the Revised Bathing Water Directive.

Designated bathing waters in England are classified annually into one of four categories:

- Excellent
- Good
- Sufficient
- Poor

These classifications are based on regulatory sampling carried out by the Environment Agency during the bathing water season (15 May to 30 September). The samples are tested for two bacteria: *Escherichia coli* (E. coli) and *Intestinal Enterococci* (I.E.). 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.

For coastal bathing waters, the below classification limits are set under the Revised Bathing Water Directive:

Coastal and transitional waters classification categories			
Parameter	Excellent	Good	Sufficient
<b>Intestinal Enterococci (cfu/100 ml)</b>	100 (*)	200 (*)	185 (**)
<b>Escherichia coli (cfu/100 ml)</b>	250 (*)	500 (*)	500 (**)

(\*) Based upon a 95-percentile evaluation.

(\*\*) Based upon a 90-percentile evaluation.

Due to government restrictions imposed to mitigate the spread of COVID-19 across England in 2020, the Environment Agency's routine bathing water quality monitoring programme was impacted. As a result of this,

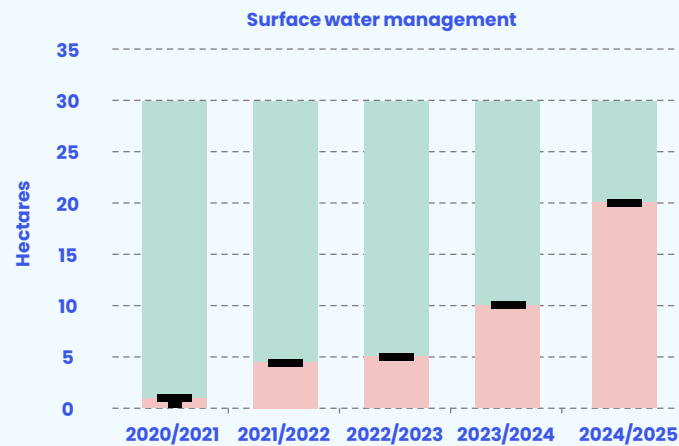
DEFRA announced that no classifications would be issued for bathing water quality in 2020. We're therefore reporting 'Not Applicable' for this performance commitment in 2020.



# Surface water management

Information type	What we mean by this
<b>Definition</b>	<p>The cumulative number of hectares (Ha) of surface water run-off removed or attenuated. This will be measured as the area of impermeable surface (Ha), removed or attenuated from the public sewer network, using blue-green infrastructure solutions or surface water disconnection over the 2020-2025 period.</p> <p>This performance commitment has three components to its measurement:</p> <ol style="list-style-type: none"> <li>1. Surface water removed through blue-green infrastructure solutions. This approach mimics the natural water cycle.</li> <li>2. Surface water removed through disconnection. This approach uses underground pipes to take surface water straight to receiving water courses.</li> <li>3. 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.</li> </ol>
<b>Additional information</b>	<p>Some useful definitions:</p> <p>Blue-green infrastructure is a term that covers a broad range of practices and solutions, it's an approach to water management that 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).</p>
<b>Okay, so what does that actually mean?</b>	<p>This performance commitment measures the total area of surface water run-off that has been removed or reduced using blue-green infrastructure solutions or surface water disconnection.</p>
<b>Unit</b>	<p>Number of hectares (Ha) to zero decimal places.</p>
<b>Measurement timing</b>	<p>Financial year</p>
<b>Incentive form</b>	<p>Revenue</p>
<b>Incentive type</b>	<p>Outperformance and underperformance payments only for 2024/2025.</p>
<b>Timing of underperformance and outperformance payments</b>	<p>In-period</p>

## Performance chart – higher is better



Target: **More than or equal to 1 hectare**

Result: **1 hectare**



See page 57 of this report for an explanation of what this chart shows and the key.

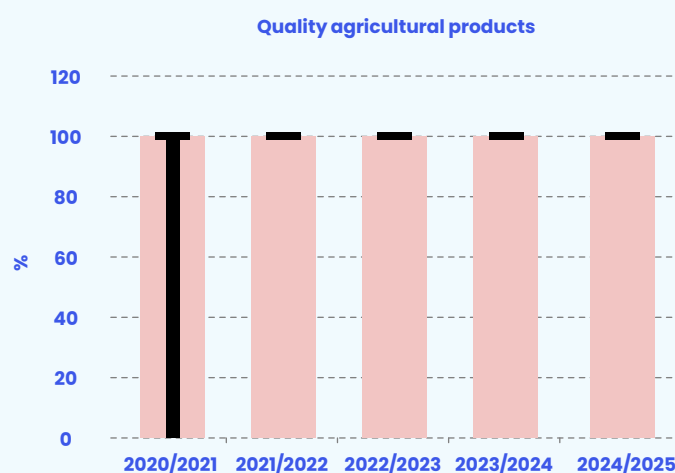
## Performance summary

We have achieved our target of one hectare of impermeable surface water removed using blue-green infrastructure solutions or surface water disconnection. We achieved this through our contribution to a Sustainable Drainage Systems (SuDS) project in Sheffield. Removal of surface water from the network via sustainable blue-green solutions or disconnection creates additional capacity to mitigate the impact of urban growth and climate change, as well as contributing to a reduction in sewer flooding, pollution and storm overflow operations.

## Quality agricultural products

Information type	What we mean by this
<b>Definition</b>	<p>The percentage of overall biosolids sent to land that meets the Biosolids Assurance Scheme (BAS) accreditation.</p> <p>The measure includes any sludge imported from third parties. Any third-parties which we export sludge to will also be required to have BAS certification.</p> <p>The performance commitment will be measured and reported using the version of the BAS in place at the time of PR19 final determination publication; issue 4, dated 13 November 2017 which became active on 1 January 2018.</p>
<b>Additional information</b>	<p>The percentage of biosolids recycled to agricultural land achieving BAS certification is calculated as a proportion of total Tonnes Dry Solid (TDS) post treatment, receiving BAS certification.</p> <p>The amount of biosolids recycled is measured in Tonnes Dry Solid (TDS) post treatment. BAS certification includes individual requirements for:</p> <ul style="list-style-type: none"> <li>• sludge treatment;</li> <li>• biosolids 'transport and storage'; and</li> <li>• application to agricultural land.</li> </ul>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the percentage of overall biosolids sent to land that meet the Biosolids Assurance Scheme (BAS) accreditation.
<b>Unit</b>	Percentage of biosolids sent to agricultural land that achieves Biosolids Assurance Scheme (BAS) certification to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payments
<b>Timing of underperformance and outperformance payments</b>	In-period

### Performance chart – higher is better



Target: **100%**

Result: **100%**



See page 57 of this report for an explanation of what this chart shows and the key.

## Performance summary

When we treat your sewage, we produce a waste product usually known as sludge. This sludge is treated to produce biosolids for recycling. The biosolids that we produce must meet a national standard which checks the processes and product quality used in biosolids. This is independently audited each year through an assurance scheme called the Biosolids Assurance Scheme (BAS). 100% of our biosolids recycled to agriculture met this standard.

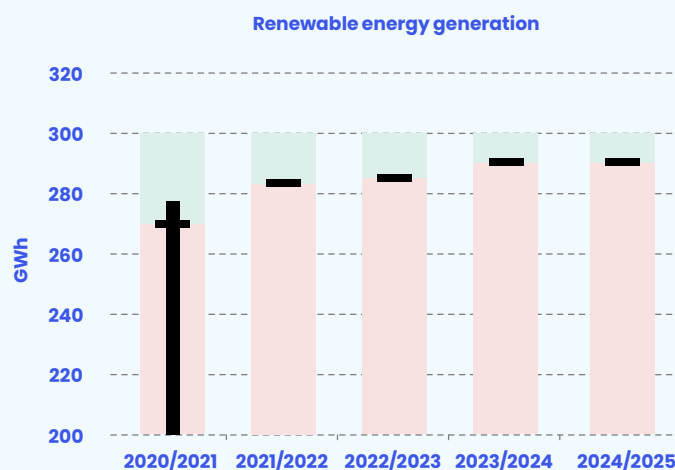
If a material doesn't comply with our processes and procedures, we would not export this material to agriculture. An alternative recycling route would be found; therefore, we'll always remain at 100% for this performance commitment.



## Renewable energy generation

Information type	What we mean by this
<b>Definition</b>	The gigawatt-hours of energy generated from the biogas that we produce. This includes use of biogas in our boilers and combined heat and power (CHP) generators onsite. For this performance commitment we may also supply biogas into the grid or use as fuel for our vehicles.
<b>Additional information</b>	Energy generation of biogas is measured in gigawatt-hours (GWh) produced by assets and operations within the Bioresources price control. The following types of power generation on our operational sites are excluded from the performance commitment: <ul style="list-style-type: none"> <li>• solar;</li> <li>• wind; and</li> <li>• hydroelectric.</li> </ul>
<b>Okay, so what does that actually mean?</b>	This performance commitment measures the amount of energy we've created from our biogas, in gigawatt-hours.
<b>Unit</b>	Gigawatt-hours (GWh) to zero decimal places.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

### Performance chart – higher is better



Target: **More than or equal to 269 GWh**

Result: **278 GWh**



See page 57 of this report for an explanation of what this chart shows and the key.



## Performance summary

We have 13 bioresource (sludge) treatment centres which have anaerobic digesters. We use these digesters to breakdown the sludge using a biological process. A by-product of the sludge breakdown is biogas and around 60% of this biogas is methane.

The methane can be used as a source of renewable energy, for example, to generate electricity and heat from a combined heat and power (CHP) generator, or to produce biomethane for grid injection.

This year we utilised 278GWh of biogas produced from our anaerobic digestion which means that we achieved our renewable energy generation target.





# Delivery of water industry national environment programme (WINEP) requirements

Information type	What we mean by this
<b>Definition</b>	<p>This performance commitment requires us to have either “met” or “not met” all of our requirements for WINEP, in the reporting year.</p> <p>This measure tracks the completion of required schemes in each year, as per the latest WINEP programme published by DEFRA. If any scheme is not delivered by the time specified in the WINEP tracker titled “Completion Date (DD/MM/YY)”, we will report “not met”.</p> <p>All WINEP schemes will be included including those reported under other performance commitments.</p>
<b>Additional information</b>	<p>The performance commitment will measure against the latest WINEP tracker in the year in which performance is being reported. Therefore, performance for 2020/2021 will be reported based on the latest WINEP programme on 31st March 2021 and the schemes which have been delivered by this date.</p> <p>We’ll secure confirmation from the Environment Agency that performance has been correctly reported.</p>
<b>Okay, so what does that actually mean?</b>	<p>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 Environment Programme (WINEP). This performance commitment measures how many WINEP projects we’ve completed each year.</p>
<b>Unit</b>	Text stating either “met” or “not met”.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Reputational
<b>Incentive type</b>	N/A
<b>Timing of underperformance and outperformance payments</b>	N/A

Target: **Met**

Result: **Met** 

## Performance summary

Our water industry national environment programme (WINEP) is the one of the largest we’ve ever delivered and will be delivered over a five-year period. Originally there were 89 agreed outputs for the 2020/2021, but a national extension of six months was granted by the Environment Agency due to the impacts of the Government restrictions as a result of the COVID-19 pandemic on construction activities. This has moved the target date for these outputs to September 2021, and we’re on track to deliver this.

# Living with Water

Information type	What we mean by this
<b>Definition</b>	The performance commitment is set as the enhancement expenditure allowed for the Hull and Haltemprice Resilience Investment. 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 <a href="#">here</a> :
<b>Additional information</b>	An additional gateway for achieving the performance commitment includes the delivery of a reduction in internal sewer flooding risk for properties in Hull and Haltemprice. The reduction in internal sewer flooding risk for properties in Hull is defined as the number of properties protected from internal sewer 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. All expenditure and performance outside of the Hull and Haltemprice resilience investment will be excluded from the measurement of the performance commitment.
<b>Okay, so what does that actually mean?</b>	This performance commitment is designed to ensure customers receive a minimum level of service for the allowed investment in the Hull and Haltemprice partnership scheme, Living with Water.
<b>Unit</b>	£m to one decimal place.
<b>Measurement timing</b>	Financial year
<b>Incentive form</b>	Revenue
<b>Incentive type</b>	Underperformance payment.
<b>Timing of underperformance and outperformance payments</b>	End of period

Target: **Measured in year 5**

Result: **On track** 

## Performance summary

This performance commitment requires us to deliver a cumulative reduction in internal flooding risk for properties in Hull and Haltemprice through the use of blue-green solutions developed and implemented as part of the 'Living with Water' partnership scheme in the region. No schemes have yet been completed for this performance commitment, therefore there's been no benefit delivered during 2020/2021.

# 4. Pro forma tables

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## Table 2 Price review and other segmental reporting

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## **Table 9 Additional regulatory information – innovation competition**

<b>Table 9A</b>	Innovation competition
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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 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 information on this page is as per the Annual Report Financial Statements. [Click here for a link](#)

Our revenue (the income we receive for the services we provide) has increased to £1,101.1m (2019/2020: £1,063.4m). This is due to the inflationary annual price increase and recovery of amounts under-billed in 2019/2020. Whilst there were significant variations for household and business customers caused by COVID-19 lockdowns impacting consumption, the net impact of these variations overall was small.

Operating costs (excluding exceptional items), totalling £831.3m (2019/2020: £842.9m) continue to be tightly managed. Operations have experienced various pressures on expenses in 2021, from dry weather in summer 2020, weather incidents in January 2021, increased insurance premiums, and additional provisions for household bad debts due to increased billing and arrears as a result of the COVID-19 impact on the economy.

Exceptional costs of £28.4m (2020: £8.1m) include £7.9m in relation to discretely identifiable increases in operational costs as a result of factors such as enhanced cleaning regimes, social distancing requiring additional vehicles, and protective equipment to keep our colleagues safe and allow essential working in accordance with government guidance; and £3.8m in relation to payments made to key delivery partners to enable them to continue to employ personnel who were critical responders in the event of operational emergencies and to cover their additional costs due to COVID-19.

## Revenue

This is the income received for services provided.

**2020/2021 £1,101.1m**

(2019/2020: £1,063.4m)

## Operating costs

These are the payments for the day-to-day operation of our business, such as operating and maintaining our network and treatment works, paying our staff and energy bills. These costs exclude exceptional items.

**2020/2021 £831.3m**

(2019/2020: £842.9m)

## Operating profit

Profit, before interest and tax.

**2020/2021 £241.4m**

(2019/2020: £212.4m)

Subsequent to our decision to ask Ofwat to refer the AMP7 Final Determination (FD) to the Competition and Markets Authority (CMA), we have incurred £10.5m (2020: £1.1m) of legal and advisory related costs. Our response to the FD was a one-off strategic review of our business processes to identify efficiencies and provide a step change in operational performance, incurring specific costs of £8.7m (2020: £2.4m).

Offsetting these exceptional costs, we have recognised insurance income, net of residual costs, of £2.5m relating to extreme weather events in previous years.

The above movements in revenue and operating costs result in a decrease in adjusted EBITDA to £592.9m (2019/2020 £553.2m). A reconciliation of EBITDA to Operating Profit is provided in our Annual Report and Financial Statements which can be found at:

Capital expenditure for the year was lower at £448.3m (2020: £485.2m) partly reflecting the first year of the AMP7 investment period, but also because of the pause to capital delivery in the early months of the pandemic. Our programme of investment has supported the delivery of our service level Performance Commitment (PC) improvements required to meet our stretching FD targets, as well as 'start early' investigations to define the appropriate solutions to deliver our large Water Industry National Environment Plan (WINEP) programme in future years.

## Adjusted EBITDA

This is an accounting term and is our earnings before interest, tax, depreciation, amortisation and exceptional items.

**2020/2021 £592.9m**

(2019/2020: £553.2m)

## Capital additions

The amount spent to acquire and enhance assets and infrastructure to provide services to our customers.

**2020/2021 £448.3m**

(2019/2020: £485.2m)

# Financial auditor's opinion

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

### Report on the audit of the Regulatory Accounting Statements

#### Opinion

We have audited certain sections of Yorkshire Water Services Ltd's ("the Company") Annual Performance Report for the year ended 31 March 2021 ("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, Line 1F.5 to 1F.6, 1F.8, 1F.12 to 1F.14, 1F.18 and 1F.23 to 1F.24 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 non-household water revenues by customer type (Table 2G), the non-household wastewater revenues by customer type (Table 2H), 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 lines 1F.4, 1F.7, 1F.9 to 1F.11, 1F.15 to 1F.17, 1F.19 to 1F.22 and 1F.25 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 4R, 5A to 5B, 6A to 6D, 7A to 7E, 8A to 8D and 9A.

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 2.08, RAG 3.12, RAG 4.09 and RAG 5.07) and the accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.12, appendix 2).

#### 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 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.

### 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 3.11, 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. 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](#) of this APR 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 Table 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 financing facilities including compliance with interest cover ratio covenants;
- understanding how the going concern model mirrors the business model and forecasts used for impairment testing;
- challenging the key assumptions used in the forecasts, such as revenue levels and capex, including the ongoing impact of COVID-19 by assessing the final determination from the CMA appeal.
- assessing the maturity profile of the company's debt and the liquidity for the going concern period;
- performing sensitivity analysis based on contradictory evidence, including consideration of the market, latest third party economic forecasts and FY22 results to date;
- assessing the historical accuracy of forecasts prepared by management; 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 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](#) of this APR, the directors are responsible for the preparation of the Annual Performance Report in accordance with 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 3.12, 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.

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 framework 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 WRSA, 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 WSR.

A further description of our responsibilities for the audit of the Regulatory Accounting Statements is located on the Financial Reporting Council's website at

This description forms part of our auditor's report.

## Report on other legal and regulatory requirements

### Use of this report

This report is made, on terms that have been agreed, solely to the Company and the WSR 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 WSR 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 WSR 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 WSR, 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 2021 on which we reported on 15 July 2021, 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.

# 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 auditors are unaware; and
- Each director has taken all the steps he or she ought to have taken as a director in order to make him or herself aware of any relevant audit information, and to establish that the company's auditors are aware of that information.

# 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.

[\*\*Table 1A:\*\*](#) Income statement

[\*\*Table 1B:\*\*](#) Statement of comprehensive income

[\*\*Table 1C:\*\*](#) Statement of financial position

[\*\*Table 1D:\*\*](#) Statement of cash flows

[\*\*Table 1E:\*\*](#) Net debt analysis (appointed activities) at 31 March 2021

[\*\*Table 1F:\*\*](#) Financial flows for the 12 months ended 31 March 2021 and for the AMP to date

**Table 1A****Income statement for the 12 months ended 31 March 2021**

Line description	Units	DPs	Statutory	Adjustments			
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
Revenue	£m	3	1098.475	13.741	15.289	-1.548	1096.927
Operating costs	£m	3	-857.533	-22.566	-13.495	-9.071	-866.604
Other operating income	£m	3	9.160	0.077	0.000	0.077	9.237
Operating profit	£m	3	250.102	-8.748	1.794	-10.542	239.560
Other income	£m	3	3.828	11.552	0.140	11.412	15.240
Interest income	£m	3	44.875	0.000	0.000	0.000	44.875
Interest expense	£m	3	-166.844	-14.342	0.000	-14.342	-181.186
Other interest expense	£m	3	0.000	0.000	0.000	0.000	0.000
Profit before tax and fair value movements	£m	3	131.961	-11.538	1.934	-13.472	118.489
Fair value gains/(losses) on financial instruments	£m	3	-102.013	0.000	0.000	0.000	-102.013
Profit before tax	£m	3	29.948	-11.538	1.934	-13.472	16.476
UK Corporation tax	£m	3	-15.418	0.000	-0.372	0.372	-15.046
Deferred tax	£m	3	8.974	2.192	0.000	2.192	11.166
Profit for the year	£m	3	23.504	-9.346	1.562	-10.908	12.596
Dividends	£m	3	45.180	0.000	0.000	0.000	45.180
<b>Tax analysis</b>							
Current year	£m	3	13.941	0.000	0.372	-0.372	13.569
Adjustments in respect of prior years	£m	3	1.477	0.000	0.000	0.000	1.477
UK Corporation tax	£m	3	15.418	0.000	0.372	-0.372	15.046
<b>Analysis of non-appointed revenue</b>							
Imported sludge	£m	3			0.000		
Tankered waste	£m	3			5.377		
Other non-appointed revenue	£m	3			9.912		
Revenue	£m	3			15.289		

**Key**

Input cell   Calculation cell   Copy cell

Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

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 Generally Accepted Accounting Principles (UK GAAP) and Regulatory Accounting Guidelines (RAG), 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 £1,096.9m (2019/2020: £1,057.2m) is due to allowed inflationary price increases and recovery of amounts under-billed in 2020. 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 £15.3m is primarily made up of £5.4m from imported tankered waste, £4.6m from Safemove (provides drainage and water searches for property buyers), £3.0m from Kelda Non-Regulated companies, £1.2m from our largest trade customer, Syngenta, £0.7m related to meter reading and £0.4m of other movements.

Operating costs, totalling £866.6m (2019/2020: £863.8m), continue to be tightly managed. Operations have experienced various pressures on expenses in 2021, including dry weather in summer, weather incidents (cold winter and storms) in January and February 2021, increased insurance premiums, and additional provisions for household bad debts due to increased billing and arrears as a result of the COVID-19 impact on the economy.

We have collected £3.7m in relation to Ofwat's new innovation fund for AMP7, which has been offset by a provision within operating costs for the obligation to pay this to the competition winners. Consequently, there is £nil net profit impact to the 2020/2021 income statement.

A new adjustment has been made to remove pension deficit recovery payments of £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 £12.5m. This has been done to ensure comparability with the treatment of financial tables Ofwat required as part of the most recent price review and 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 WASCs who have adopted IFRS and are required to follow defined benefit pension scheme accounting, therefore excluding cash contributions in excess of the IAS 18 defined benefit pension cost from their operating expenditure.

A further new adjustment of £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.

Included within operating costs are exceptional costs of £34.1m (2019/2020: £11.5m):

- £7.9m relates to exceptional operating costs as a result of enhanced cleaning regimes, social distancing requiring additional vehicles and protective equipment;
- £3.8m relates to payments made to key delivery partners to cover their additional costs of operation due to COVID-19;
- £10.5m is associated with legal and advisory costs in relation to the referral of the AMP7 Final Determination to the CMA;
- In response to the Final Determination, we carried out a strategic review of our business processes which resulted in £8.7m specific costs including severance; and
- £3.2m relates to costs incurred as a result of extreme weather events in the previous year. £5.7m of insurance income relating to these costs, and costs incurred in 2019/2020, has been presented in other operating income.

Other operating income includes £5.7m of exceptional insurance income received in relation to extreme weather events. In 2019/2020 other operating income included £3.4m of exceptional net profit on the sale of our non-household retail business.

Whilst we have delivered operating cost efficiencies, operating expenditure pressures arising from external factors include:

- The extreme dry weather in summer and extreme wet weather conditions between November 2020 to February 2021 resulted in an increase in rainfall compared to prior years resulting in an increase in energy costs across the sewerage network.
- The COVID-19 pandemic continues to increase operational costs as ensure we continue to provide an essential service whilst protecting the health and safety of our colleagues and customers.
- Insurance premiums have increased, principally following historic flood insurance claims.
- Increased imported commodity cost pressures, such as chemicals have continued. As with other businesses we are seeing that the cost of buying from overseas businesses is increasing, which is commonly considered to be due to the effects of Brexit.
- Energy prices have increased through the year.
- Continuation of operating expenditure to maintain performance commitment levels for each respective price control as we enter a new AMP cycle.

Interest income has decreased to £44.9m (2019/2020: £50.5m) and interest expense has decreased to £181.2m (2019/2020: £209.9m), both due to the reduction in LIBOR rates and in RPI rates on inflation linked debt.

Interest expense of £181.2m comprises:

- Interest payable on intra-group borrowings of £176.0m. 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 DPC arrangements of £17.9m;
- £2.7m relates to amortisation of debt issuance costs;
- Interest payable in relation to other leases under IFRS 16 of £0.7m; offset by
- Other financing costs/interest costs, which predominantly relates to net interest receivable on from swaps on in hedge relationships, of (£16.1m). Yorkshire Water holds £1,289.0m notional value of inflation linked swaps on which the company receives interest based on the London Interbank Offered Rate (LIBOR) and pays interest based on inflation (RPI).

There has been a reduction in market expectations of future LIBOR as well as future RPI rates. This means that the future expectations of the net amount payable/receivable on the company's inflation linked swaps (i.e. the LIBOR linked interest receivable versus the inflation linked interest payable) is higher than that assumed last year. This in turn is largely responsible for the £102.0m loss (2019/2020: £35.9m loss) on the fair value on financial instruments. Net fair value charges of £102.0m includes £48.3m (2019/2020: £29.0m) in relation to the RPI uplift on inflation linked swaps and £2.3m relating to a reclass of interest from interest to fair value.

	2020/2021 £m	2019/2020 £m
Gross dividends	45.2	110.0
Dividends used to make inter-company interest payments	(43.2)	(47.8)
Dividends used to pay head office costs and Kelda Finance interest	(2.0)	(62.2)
Dividends paid to the ultimate shareholders	-	-



The company's dividend policy is to:

- Deliver a base dividend from a set yield that 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;
- Be transparent in the calculation and payment of dividends and to clearly justify the payment in relation to the factors outlined above; and
- Where it is foreseeable, we will have sufficient profits available for distribution and subject to appropriate financial resilience testing, to continue to pay dividends consistent with this policy.

Any distributions available to the shareholders of Kelda Holdings Limited are determined by the amount payable in accordance with the above policy, after deducting dividends used to pay head office costs for Kelda Group and Kelda Finance interest and fees. There were no distributions to shareholders in 2020/2021.

'Dividends used to make inter-company interest payments' of £43.2m (2019/2020: £47.8m) were paid to Kelda Eurobond Co. Limited (a Kelda Group company). This is to enable Kelda Eurobond Co. Limited to pay Yorkshire Water interest (plus an element of capital £8.1m) on two loans that Yorkshire Water has previously made to Kelda Eurobond Co. Limited.

In the current year, £2.0m was used to pay interest and fees on debt issued by Kelda Finance (No.2) Limited, whilst in the prior year, £62.2m was used to pay interest on debt issued by Kelda Finance (No.2) Limited and Kelda Finance (No.3) Plc together with head office costs. The 2019/2020 amount was to substantially cover requirements for both 2019/2020 (£32.1m) and 2010/2021 (£30.1m).

No dividends have been proposed post year-end (2019/2020: £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 £9.346m has increased from the previous year (£8.301m in 2019/2020). This is predominantly due to capitalised interest and related deferred tax, which has a net impact of £8.397m (2019/2020: £8.301m), and the application of IFRS 16 for the first time in the APR this year, giving rise to an adjustment of £0.949m (2019/2020: £nil).

Line description	G&C Income	IFRIC 18	Capitalisation of interest and related depreciation	IFRS 15 Revenue Recognition	IFRS 16 Leases	Total
Line 1A.1 Revenue	(9.262)	(2.290)		25.293		13.741
Line 1A.2 Operating costs			3.830	(25.293)	(1.104)	(22.567)
Line 1A.3 Other operating income					0.077	0.077
Line 1A.5 Other income	9.262	2.290				11.552
Line 1A.7 Interest expense			(14.196)		(0.145)	(14.341)
Line 1A.13 Deferred tax			1.970		0.223	2.193
<b>Total</b>	-	-	(8.396)	-	(0.949)	(9.345)

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

- Grants and contribution income totalling £9.3m recognised in revenue for statutory reporting is reclassified in other income for regulatory financial reporting. As such, this is a presentational adjustment only;
- Adopted sewers income of £2.3m recognised in revenue for statutory reporting is reclassified in other income for regulatory financial reporting. As such, 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 £14.2m, reduce related asset depreciation by £3.8m and reduce the associated deferred tax debit by £2.0m. The net effect of this adjustment is a £8.4m decrease to the regulatory profit for the year;
- £25.3m 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 RAG guidelines, this adjustment has been reversed in the income statement for the appointed business; 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 YWS reports under the accounting standard FRS 102, a RAG adjustment has been included for the year ended 31 March 2021 to ensure IFRS 16 is applied. This has resulted in YWS 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 £6.6m;
  - Lease liabilities of £7.8m are included, of which £1.2m is due in less than 1 year and £6.6m is due in more than 1 year;
  - Operating expenditure has decreased by £1.1m 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 £0.1m have been incurred for regulatory financial reporting.

Together the above adjustments for IFRS16 result in a net decrease in profit before tax of £0.9m.

# **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 25 November 2020.

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 2021.

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 Financeability 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. 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

The current tax charge allowed in price limits is reconciled to the appointed current tax charge as follows:

	£m
Total current tax charge allowed in price limits (based on corporation tax rate of 19% used in setting prices)	7.3
<b>Tax effect of differences due to:</b>	
Lower operating profit	(30.8)
Lower finance costs included in corporation tax calculations	9.0
<b>Fixed assets</b>	
Assumptions regarding allowable depreciation and potential capital allowance claims	21.3
Capital allowances waived and deferred to future years (1)	7.2
<b>Other</b>	
Assumptions regarding pension deductions	(0.9)
Assumptions regarding non tax deductible expenses (2)	0.4
Prior year adjustments	1.5
<b>Appointed current tax charge (3)</b>	<b>15.0</b>

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 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 HMRC.

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.



# Current tax 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 the Company's 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	118.5
Tax charge at the standard rate of corporation tax in the UK of 19%	22.5
<b>Adjustments in relation to assets</b>	
Non-deductible accounting depreciation on fixed assets and amortisation of intangible assets	40.4
Potential capital allowances available to claim on fixed assets (1)	(45.8)
Capital allowances waived and deferred to future years (1)	7.2
<b>Adjustments in relation to financial instruments</b>	
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	(9.4)
<b>Other adjustments</b>	
Chargeable gain crystallising in the year	1.8
Deductible payments to pension scheme	(3.6)
Employee remuneration accrued but not deductible until paid	0.6
Non-deductible costs (2)	0.5
Non-taxable profits (3)	(0.7)
Adjustments in relation to prior years	1.5
<b>Appointed current tax charge (4)</b>	<b>15.0</b>

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 HMRC.

**Table 1B****Statement of comprehensive income for the 12 months ended 31 March 2021**

Line description	Units	DPs	Statutory	Adjustments			
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
Profit for the year	£m	3	23.504	-9.346	1.562	-10.908	12.596
Actuarial gains/(losses) on post-employment plans	£m	3	-0.507	0.000	0.000	0.000	-0.507
Other comprehensive income	£m	3	184.076	0.000	0.000	0.000	184.076
Total Comprehensive income for the year	£m	3	207.073	-9.346	1.562	-10.908	196.165

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 £23.5m is adjusted for actuarial losses on post-employment plans of £0.5m, and other comprehensive expense of £184.1m. Other comprehensive expenses comprise a revaluation gain on fixed assets before taxation of £217.0m, less related deferred tax on the revaluation of £41.2m, plus the net effect of cash flow hedges amounting to £8.2m.

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 £217.0m 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. Whilst there is uncertainty in the forecast as a result of COVID-19, an assumption underpins the infrastructure asset valuation that COVID-19 will have a short-term and unpredictable impact, and the increased uncertainty was, therefore, factored into the discount rate applied to the future cash flows.

The statutory accounting policy is that external valuations on properties are performed on a periodic basis. An interim valuation is recorded in intervening years based on directors' valuations. The external valuations undertaken at 31 March 2019 have been considered at 31 March 2021 by the directors, who concluded that the current book values are not materially different to current market values. This extensive property portfolio review included the impact of COVID-19 and increased uncertainty in the property market but concluded that no material changes are required.

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 £8.2m has been recognised directly in reserves through the statement of comprehensive income.

There is a net actuarial loss on the pension scheme of £0.6m within Yorkshire Water, with a corresponding adjustment to tax of £0.1m, resulting in a net adjustment to other comprehensive income of £0.5m. 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 4.09 – Guideline for the table definitions in the annual performance report

**Table 1C****Statement of financial position for the 12 months ended 31 March 2021**

				Adjustments			
				Differences between statutory and RAG definitions			
Line description	Units	DPs	Statutory		Non-appointed	Total adjustments	Total appointed activities
Non-current assets							
Fixed assets	£m	3	8211.331	-139.016	2.880	-141.896	8069.435
Intangible assets	£m	3	155.920	0.000	0.000	0.000	155.920
Investments – loans to group companies	£m	3	941.300	0.000	0.000	0.000	941.300
Investments – other	£m	3	2.245	0.000	0.000	0.000	2.245
Financial instruments	£m	3	202.449	0.000	0.000	0.000	202.449
Retirement benefit assets	£m	3	0.000	0.000	0.000	0.000	0.000
Total	£m	3	9513.245	-139.016	2.880	-141.896	9371.349
Current assets							
Inventories	£m	3	4.726	0.000	0.000	0.000	4.726
Trade & other receivables	£m	3	279.066	0.000	4.861	-4.861	274.205
Financial instruments	£m	3	29.566	0.000	0.000	0.000	29.566
Cash & cash equivalents	£m	3	187.100	0.000	0.000	0.000	187.100
Total	£m	3	500.458	0.000	4.861	-4.861	495.597
Current liabilities							
Trade & other payables	£m	3	-325.329	0.000	-6.306	6.306	-319.023
Capex creditor	£m	3	-78.753	0.000	0.000	0.000	-78.753
Borrowings	£m	3	-512.652	-1.225	0.000	-1.225	-513.877
Financial instruments	£m	3	0.000	0.000	0.000	0.000	0.000
Current tax liabilities	£m	3	0.000	0.000	0.000	0.000	0.000
Provisions	£m	3	-12.219	0.000	0.000	0.000	-12.219
Total	£m	3	-928.953	-1.225	-6.306	5.081	-923.872
Net Current assets/ (liabilities)	£m	3	-428.495	-1.225	-1.445	0.220	-428.275

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

## Table 1C – Continued

### Statement of financial position for the 12 months ended 31 March 2021

				Adjustments			
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
Line description	Units	DPs	Statutory				
Non-current liabilities							
Trade & other payables	£m	3	-2.106	0.000	0.000	0.000	-2.106
Borrowings	£m	3	-4990.143	-6.562	0.000	-6.562	-4996.705
Financial instruments	£m	3	-2343.945	0.000	0.000	0.000	-2343.945
Retirement benefit obligations	£m	3	0.000	0.000	0.000	0.000	0.000
Provisions	£m	3	0.000	0.000	0.000	0.000	0.000
Deferred income – G&Cs	£m	3	-328.177	-1.663	-1.750	0.087	-328.090
Deferred income – adopted assets	£m	3	-185.652	31.498	0.000	31.498	-154.154
Preference share capital	£m	3	0.000	0.000	0.000	0.000	0.000
Deferred tax	£m	3	-393.105	27.892	0.000	27.892	-365.213
Total	£m	3	-8243.128	51.165	-1.750	52.915	-8190.213
Net assets	£m	3	841.622	-89.076	-0.315	-88.761	752.861
Equity							
Called up share capital	£m	3	11.000	0.000	0.000	0.000	11.000
Retained earnings & other reserves	£m	3	830.622	-89.076	-0.315	-88.761	741.861
Total Equity	£m	3	841.622	-89.076	-0.315	-88.761	752.861

Table 1C takes the Balance Sheet as at 31 March 2021 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.

Cash and cash equivalents (line 1C.11) and current borrowings (line 1C.15) exclude swap collateral of £10.8m for consistency with borrowings (line 1E.1), cash (line 1E.4) and short-term deposits (line 1E.5) in Table 1E, where it is not included for as it is ringfenced and not available to YWS. In the prior year it was included in cash and cash equivalents and current borrowings in Table 1C.

Trade and other payables with current liabilities (line 1C.13) includes a provision of £3.7m relating to amounts collected from customers for the Innovation Fund in 2020/2021 awaiting distribution to the competition winners, as noted in the Table 1A commentary.

The table on [page 165](#) details the total adjustment of £89.1m 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.

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Line description	G&C Income	IFRIC 18	Capitalisation of interest and related depreciation	IFRS 15 Revenue Recognition	IFRS 16 Leases	Total
Line 1C.1 Fixed assets			- 145.631		6.615	- 139.016
Line 1C.9 Trade and other receivables				-		-
Line 1C.15 Borrowings (current)					- 1.225	- 1.225
Line 1C.22 Borrowings (non-current)					- 6.562	- 6.562
Line 1C.26 Deferred income - G&Cs	- 1.663					- 1.663
Line 1C.27 Deferred income - adopted assets		31.498				31.498
Line 1C.29 Deferred tax			27.669		0.223	27.892
Line 1C.33 Retained earnings & other reserves	1.663	- 31.498	117.962		0.949	89.076

## 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 2019/2020.

### Key

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 1D****Statement of cashflows for the 12 months ended 31 March 2021**

				Adjustments			
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	Total appointed activities
Line description	Units	DPs	Statutory				
Operating activities							
Operating profit	£m	3	250.102	-8.748	1.794	-10.542	239.560
Other income	£m	3	39.741	-35.914	0.140	-36.054	3.687
Depreciation	£m	3	323.140	-2.713	0.163	-2.876	320.264
Amortisation - G&Cs	£m	3	-11.552	11.552	0.000	11.552	0.000
Changes in working capital	£m	3	33.233	0.000	3.962	-3.962	29.271
Pension contributions	£m	3	-12.494	0.000	0.000	0.000	-12.494
Movement in provisions	£m	3	0.000	0.000	-6.059	6.059	6.059
Profit on sale of fixed assets	£m	3	-3.046	-0.077	0.000	-0.077	-3.123
Cash generated from operations	£m	3	619.124	-35.900	0.000	-35.900	583.224
Net interest paid	£m	3	-92.228	-0.145	0.000	-0.145	-92.373
Tax paid	£m	3	-13.612	0.000	0.000	0.000	-13.612
Net cash generated from operating activities	£m	3	513.284	-36.045	0.000	-36.045	477.239
Investing activities							
Capital expenditure	£m	3	-472.645	0.000	0.000	0.000	-472.645
Grants & Contributions	£m	3	0.000	35.913	0.000	35.913	35.913
Disposal of fixed assets	£m	3	3.969	0.000	0.000	0.000	3.969
Other	£m	3	0.000	0.000	0.000	0.000	0.000
Net cash used in investing activities	£m	3	-468.676	35.913	0.000	35.913	-432.763
Net cash generated before financing activities	£m	3	44.608	-0.132	0.000	-0.132	44.476

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



## Table 1D – Continued

### Statement of cashflows for the 12 months ended 31 March 2021

				Adjustments			
				Differences between statutory and RAG definitions	Non- appointed	Total adjustments	Total appointed activities
Line description	Units	DPs	Statutory				
Cashflows from financing activities							
Equity dividends paid	£m	3	-45.180	0.000	0.000	0.000	-45.180
Net loans received	£m	3	-63.897	0.132	0.000	0.132	-63.765
Cash inflow from equity financing	£m	3	0.000	0.000	0.000	0.000	0.000
Net cash generated from financing activities	£m	3	-109.077	0.132	0.000	0.132	-108.945
Increase (decrease) in net cash	£m	3	-64.469	0.000	0.000	0.000	-64.469

YWS 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 and 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 £64.5m for 2020/2021. Cash generated from operations of £583.2m was primarily offset by:

- Cash investment in fixed assets including investment in tangible and intangible assets of £472.6m;
- Interest paid of £92.4m 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 group and dividends to the owners of Yorkshire Water totalling £45.2m as detailed in Table 1A commentary; and
- Repayment of borrowings of £63.8m.

£35.914m in relation to Grants and Contribution 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. We have manually updated the other income statutory to RAG adjustment so that the amortisation of grants and contributions (£11.552m) is not included as a statutory to RAG cashflow adjustment to other income as it is a non-cash movement. This treatment is consistent with our return for 2019/2020 and as advised by Ofwat in query responses from other WASCs.

The table on [page 168](#) 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.

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Line description	G&C Income	IFRIC 18	Capitalisation of interest and related depreciation	IFRS 15 Revenue Recognition	IFRS 16 Leases	Total
Line 1D.1 Operating profit	(9.261)	(2.290)	3.830		(1.027)	(8.748)
Line 1D.2 Other income	(38.204)	2.290				(35.914)
Line 1D.3 Depreciation			(3.830)		1.117	(2.713)
Line 1D.4 Amortisation – G&Cs	11.552					11.552
Line 1D.8 Profit on sale of fixed assets					(0.077)	(0.077)
Line 1D.10 Net interest paid					(0.145)	(0.145)
Line 1D.14 Grants & Contributions	35.913					35.913
Line 1D.20 Net loans received					0.132	0.132
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**Table 1E****Net debt analysis (appointed activities) at 31 March 2021**

					Index linked		
Line description	Units	DPs	Fixed rate	Floating rate	RPI	CPI/CPIH	Total
<b>Interest rate risk profile</b>							
Borrowings (excluding preference shares)	£m	3	2477.909	1287.620	1714.188	127.862	5607.579
Preference share capital	£m	3					0.000
Total borrowings	£m	3					5607.579
Cash	£m	3					-105.293
Short term deposits	£m	3					-81.807
Net Debt	£m	3					5420.479
<b>Gearing</b>							
Gearing	%	3					77.167%
Adjusted Gearing	%	2					77.66%
<b>Interest</b>							
Full year equivalent nominal interest cost	£m	3	46.001	15.977	134.840	1.636	198.454
Full year equivalent cash interest payment	£m	3	46.001	15.977	84.470	0.689	147.137
<b>Indicative interest rates</b>							
Indicative weighted average nominal interest rate	%	2	1.86%	1.24%	7.87%	1.28%	3.54%
Indicative weighted average cash interest rate	%	2	1.86%	1.24%	4.93%	0.54%	2.62%
<b>Time to maturity</b>							
Weighted average years to maturity	nr	2	11.77	5.57	23.79	8.47	13.94

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

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 year to maturity (line 1E.13) of approximately 14 years, which is consistent with the planned approach to the company's financing requirements.

All figures in Table 1E have been calculated in reference to 'RAG 4.09 – Guideline for the table definitions in the annual performance report'. Borrowings have been calculated on a notional basis and include all debt relevant to the regulated company even where this has been taken out by an associate or 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.

<b>Reconciliation of borrowing amounts contained within Table 1C (lines 15 &amp; 22) to Table 1E (line 1)</b>		<b>£m</b>
<b>Table 1C:</b>		
1C.15 – Borrowings (Current liabilities)		(513.9)
1C.22 – Borrowings (Non-Current liabilities)		(4,996.7)
Table 1C – Borrowings		(5,510.6)
<b>Adjustments:</b>		
(i) Fair value adjustments of bonds held in subsidiary companies included in Table 1C but not included in Table 1E		89.5
(ii) Accretion of IL swaps not included in Table 1C but included in Table 1E		(187.0)
(iii) The difference in the book value of internal loans that were exchanged. 1C included the value reported in Yorkshire Water Services Limited and 1E includes the embedded value of the loans taken out by the financing subsidiary.		16.3
(iv) Unamortised issue costs are included in Table 1C but not included in Table 1E		(15.5)
(v) Other reconciling items		(0.3)
<b>Total adjustments:</b>		<b>(97.0)</b>
Table 1E – Borrowings		<b>(5,607.6)</b>

Fixed and floating rate debt has decreased year-on-year due to the amortisation of borrowings which has been partially offset by the inclusion of IFRS16 lease liabilities. No new debt was raised during the year ended 31 March 2021, as the £400m raised in November 2019 provided sufficient funds. £350m of new fixed rate debt was raised after the year end, in April 2021. Index linked debt has increased due to indexation in the year.

Adjusted gearing 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

Table 1E rows 9 to 12 contain the full year equivalent nominal and cash interest along with indicative weighted average interest rates. Fixed interest has decreased year-on-year mainly because of past financing transactions conducted on our index linked swap portfolio. LIBOR rates have decreased from March 2020 to March 2021; however, our floating rate interest costs have increased slightly because of the reduction in the receipt leg of our index-linked swap portfolio which is LIBOR related. Retail price inflation has decreased from 2.6 per cent at 31 March 2020 to 1.5 per cent at 31 March 2021, which is the primary cause of the decrease in the weighted average nominal interest rate of indexed linked debt.

The weighted average maturity has fallen by one year due to the natural reduction in maturity of debt being one year on, plus no new debt being raised during the year.

**Table 1F (Ofwat)**

**Financial flows for the 12 months ended 31 March 2021 and for the price review to date (2017–18 financial year average CPIH)**

Line description	12 months ended 31 March 2021						Average 2020–25					
	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
Units		%			£m			%			%	
DPs		3			3			3			3	
<b>Return on regulatory equity</b>												
Return on regulatory equity	4.35%	4.35%	4.35%	114.745	114.745	64.482	4.35%	4.35%	4.35%	114.745	114.745	64.482
Regulatory equity	2638.285	2638.285	1482.600				2638.29	2638.29	1482.60			
<b>Financing</b>												
Gearing		0.00%	1.69%		0.000	25.069		0.00%	1.69%		0.000	25.069
Gearing benefits sharing		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Variance in corporation tax		-0.24%	-0.43%		-6.322	-6.322		-0.24%	-0.43%		-6.322	-6.322
Group relief		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Cost of debt		-0.39%	-0.90%		-10.369	-13.397		-0.39%	-0.90%		-10.369	-13.397
Hedging instruments		-0.30%	-0.69%		-7.876	-10.176		-0.30%	-0.69%		-7.876	-10.176
Return on regulatory equity including Financing adjustments	4.35%	3.42%	4.02%	114.745	90.178	59.656	4.35%	3.42%	4.02%	114.745	90.178	59.656
<b>Operational Performance</b>												
Totex out / (under) performance		-1.58%	-2.81%		-41.608	-41.608		-1.58%	-2.81%		-41.608	-41.608
ODI out / (under) performance		-0.05%	-0.10%		-1.445	-1.445		-0.05%	-0.10%		-1.445	-1.445
C-Mex out / (under) performance		0.02%	0.03%		0.466	0.466		0.02%	0.03%		0.466	0.466

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**Table 1F (Ofwat) continued****Financial flows for the 12 months ended 31 March 2021 and for the price review to date (2017–18 financial year average CPIH)**

Line description	12 months ended 31 March 2021						Average 2020–25					
	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
Units DPs	%			£m			%			%		
D-Mex out / (under) performance		-0.11%	-0.19%		-2.884	-2.884		-0.11%	-0.19%		-2.884	-2.884
Retail out / (under) performance		-0.25%	-0.44%		-6.591	-6.591		-0.25%	-0.44%		-6.591	-6.591
Other exceptional items		0.22%	0.40%		5.871	5.871		0.22%	0.40%		5.871	5.871
Operational performance total		-1.75%	-3.12%		-46.191	-46.191		-1.75%	-3.12%		-46.191	-46.191
RORE	4.35%	1.67%	0.91%	114.745	43.987	13.465	4.35%	1.67%	0.91%	114.745	43.987	13.465
Actual performance adjustment 2015–20	0.65%	0.65%	1.16%	17.159	17.159	17.159	0.65%	0.65%	1.16%	17.159	17.159	17.159
Total earnings	5.00%	2.32%	2.07%	131.904	61.146	30.624	5.00%	2.32%	2.07%	131.904	61.146	30.624
RCV growth from inflation	1.00%	1.00%	1.00%	26.387	26.387	14.828	1.00%	1.00%	1.00%	26.387	26.387	14.828
Voluntary sharing arrangements		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Total shareholder return	6.00%	3.32%	3.07%	158.291	87.532	45.452	6.00%	3.32%	3.07%	158.291	87.532	45.452
<b>Dividends</b>												
Gross Dividend	4.00%	1.64%	2.91%	105.531	43.154	43.154	4.00%	1.64%	2.91%	105.531	43.154	43.154
Interest Received on Intercompany loans	0.00%	-1.56%	-2.78%	0.000	-41.244	-41.244	0.00%	-1.56%	-2.78%	0.000	-41.244	-41.244
Retained Value	2.00%	3.25%	2.94%	52.759	85.622	43.542	2.00%	3.25%	2.94%	52.759	85.622	43.542

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## Table 1F (YW)

Financial flows for the 12 months ended 31 March 2021 and for the price review to date (2017–18 financial year average CPIH)

Line description	12 months ended 31 March 2021						Average 2020–25					
	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
Units DPs	%			£m			%			%		
	3			3			3			3		
<b>Return on regulatory equity</b>												
Return on regulatory equity	4.35%	4.35%	6.26%	114.745	114.765	92.782	4.35%	4.35%	6.26%	114.745	114.765	92.782
Regulatory equity	2638.285	2638.285	1482.600				2638.29	2638.29	1482.60			
<b>Financing</b>												
Gearing		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Gearing benefits sharing		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Variance in corporation tax		-0.24%	-0.43%		-6.322	-6.322		-0.24%	-0.43%		-6.322	-6.322
Group relief		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Cost of debt		-1.06%	-2.43%		-27.835	-35.964		-1.06%	-2.43%		-27.835	-35.964
Hedging instruments		-0.30%	-0.69%		-7.876	-10.176		-0.30%	-0.69%		-7.876	-10.176
Return on regulatory equity including Financing adjustments	4.35%	2.76%	2.72%	114.745	72.732	40.320	4.35%	2.76%	2.72%	114.745	72.732	40.320
<b>Operational Performance</b>												
Totex out / (under) performance		-1.58%	-2.81%		-41.608	-41.608		-1.58%	-2.81%		-41.608	-41.608
ODI out / (under) performance		-0.05%	-0.10%		-1.445	-1.445		-0.05%	-0.10%		-1.445	-1.445
C-Mex out / (under) performance		0.02%	0.03%		0.466	0.466		0.02%	0.03%		0.466	0.466

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Table 1F (YW) continued

Financial flows for the 12 months ended 31 March 2021 and for the price review to date (2017–18 financial year average CPIH)

Line description	12 months ended 31 March 2021						Average 2020–25					
	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
Units DPs	%			£m			%			%		
D-Mex out / (under) performance		-0.11%	-0.19%		-2.884	-2.884		-0.11%	-0.19%		-2.884	-2.884
Retail out / (under) performance		-0.25%	-0.44%		-6.591	-6.591		-0.25%	-0.44%		-6.591	-6.591
Other exceptional items		0.22%	0.40%		5.871	5.871		0.22%	0.40%		5.871	5.871
Operational performance total		-1.75%	-3.12%		-46.191	-46.191		-1.75%	-3.12%		-46.191	-46.191
RORE	4.35%	1.01%	-0.40%	114.745	26.541	-5.871	4.35%	1.01%	-0.40%	114.745	26.541	-5.871
Actual performance adjustment 2015–20	0.00%	0.00%	0.00%	0.000	0.000	0.000	0.00%	0.00%	0.00%	0.000	0.000	0.000
Total earnings	4.35%	1.01%	-0.40%	114.745	26.541	-5.871	4.35%	1.01%	-0.40%	114.745	26.541	-5.871
RCV growth from inflation	1.00%	1.00%	1.00%	26.387	26.387	14.828	1.00%	1.00%	1.00%	26.387	26.387	14.828
Voluntary sharing arrangements		0.00%	0.00%		0.000	0.000		0.00%	0.00%		0.000	0.000
Total shareholder return	5.35%	2.01%	0.60%	141.132	52.928	8.958	5.35%	2.01%	0.60%	141.132	52.928	8.958
<b>Dividends</b>												
Gross Dividend	4.00%	1.64%	2.91%	105.531	43.154	43.154	4.00%	1.64%	2.91%	105.531	43.154	43.154
Interest Received on Intercompany loans	0.00%	-1.56%	-2.78%	0.000	-41.244	-41.244	0.00%	-1.56%	-2.78%	0.000	-41.244	-41.244
Retained Value	1.35%	1.93%	0.48%	35.600	51.018	7.048	1.35%	1.93%	0.48%	35.600	51.018	7.048

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

As at publication date of the updated APR Yorkshire Water would like to explain that two versions of Table 1F have been included due to ongoing discussions with Ofwat regarding potential differences of methodology and presentation within lines 1F.1, 1F.3, 1F.7 and 1F.18. Yorkshire Water has shared its proposed amendments with Ofwat and are awaiting their consideration of our representations.

The areas of difference between the two tables are as follows:

- an inconsistency in the use of inflation between the return on regulated equity (blended RPI/CPIH) and the allowed cost of debt (CPIH) – 1F.1 and 1F.7
- an incorrect representation of the actual return on equity – 1F.1 and 1F.3
- an inconsistency between accrued and in year out performance benefits, which could result in the double counting of returns – 1F.18

Table 1F (YW) shows the return using the methodology which Yorkshire Water believes to be a more appropriate representation, based on the ongoing discussions that have been held with Ofwat.

Table 1F (Ofwat) shows the alternative return using the original Ofwat methodology.

Yorkshire Water has included an explanation of the differing methodologies between the two tables within the individual line commentary, detailed below.

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 structure Ofwat have used for setting the prices that customers pay.

In order to illustrate this difference in structures the table includes the following three columns:

- **Notional returns and notional regulatory equity** The value column in £m represents the notional returns set by the CMA as part of the PR19 final determination (FD19). The percentage column represents the notional return divided by the notional regulated equity, which is calculated based on the FD19 notional equity level of 40%.

- **Actual returns and notional regulatory equity** The value column in £m represents the actual returns earned by the Company. The percentage column represents the actual return divided by the notional regulated equity, which is calculated based on FD19 notional equity level of 40%.
- **Actual returns and actual regulatory equity** The value column in £m represents the actual returns earned by the Company. The percentage column represents the actual return divided by our actual regulated equity, which is calculated based on our average level of equity for the year.

As our actual regulated equity is lower than Ofwat's notional regulated equity, the actual return on actual equity column in the table above will show different percentage returns for the same performance in £m terms.

## Return on regulatory equity (lines 1-2)

### 1F.1 (Return on regulatory equity)

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.

Table 1F (YW) shows the increased return on regulated equity that Yorkshire Water's actual structure should earn. This is based on the CMA findings that the total return based on the Company's actual structure should be equal to the total return of the notional structure regardless of the gearing level. This results in an increase in the return on regulated equity within line 1F.1 rather than an adjustment due to gearing. This is a presentational change between lines 1F.1 and 1F.3 which is critical as it removes the incorrect perception that returns are dependent on the level of gearing.

In addition to the above presentational change Yorkshire Water have also included an adjustment for the inconsistent inflation assumptions between return on regulated equity and the allowed cost of debt. This results in an increased overall return being shown.

Table 1F (Ofwat) continues to follow the Ofwat methodology and fixes the actual return on equity to the return on equity of the notional structure and shows the balance as a gearing adjustment in line 1F.3

### 1F.2 (Regulatory equity)

The notional equity was provided by Ofwat, the actual equity was calculated in line with the guidance from Ofwat.

## Financing (lines 3–9)

### 1F.3 (Gearing)

In Table 1F (YW) we have not included an amount in 1F.3 for a financing adjustment to the return on regulatory equity. This reflects consideration by Yorkshire Water of the recent conclusions of the CMA regarding the identification and quantification of excess benefits (i.e. returns) from high gearing structures. [ref = para 9.12.12– 16 of CMA final report and is in line with our proposal in line 1F.1.

In Table 1F (Ofwat) we have followed Ofwat methodology.

### 1F.4 (Gearing benefits sharing)

This is a zero value as the Gearing Outperformance Sharing Mechanism (GOSM) does not apply to Yorkshire Water as per the CMA FD.

### 1F.5 (Variance in corporation tax)

This is calculated in line with the Ofwat guidance.

### 1F.6 (Group relief)

This is a zero value. From 2017/2018 all losses surrendered to Yorkshire Water 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 (Cost of debt)

The cost of debt impact (excluding hedging instruments) has been calculated in line with Ofwat guidance.

The net actual interest paid as reported in Table 1A has been adjusted for inter-company interest and then divided by our average net debt (using the opening and closing net debt as reported in Table 1E) to calculate the actual nominal cost of debt.

Average CPIH within the year has then been deducted from the actual nominal cost of debt to calculate the actual real cost of debt.

The difference between the actual real cost of debt and the 2.49% provided by Ofwat is used as the total impact of the cost of debt.

Actual returns and notional regulated equity

The difference calculated above is then multiplied by the average RCV and the notional level of gearing (60%).

An adjustment is then made to exclude the element of this variance, which is attributed to Hedging instruments, reported in line 1F.8

Actual returns and actual regulated equity

The difference calculated above is then multiplied by the average RCV and the actual average level of gearing (using the opening and closing net debt reported in Table 1E).

An adjustment is then made for corporation tax at the standard rate.

An adjustment is then made to exclude the element of this variance, which is attributed to Hedging instruments, reported in line 1F.8.

Table 1F (YW) reflects the impact of the change Yorkshire Water has included to adjust for the inconsistent inflation assumptions between the return on regulated equity and the allowed costs of debt, as noted within 1F.1. This results in a reduction to the overall return being shown.

In Table 1F (Ofwat) Yorkshire Water has followed Ofwat methodology.

### 1F.8 (Hedging instruments)

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 0.2%.

### 1F.9 (Return on regulatory equity including Financing adjustments)

This is a calculated line (The sum of lines 1F.3 to 1F.8 plus 1F.1).

## Operational Performance (lines 10–22)

### 1F.10 (Totex out/(under) performance)

This is taken from Table 4C line 21 and indexed into 2017–18 CPIH average price base.

### 1F.11 (ODI out/(under) performance)

This is the ODI net penalty as reported within the ODI performance model.

### 1F.12 (C-MeX out/(under) performance)

As per Ofwat guidance this is zero until the values have been supplied by Ofwat.

### 1F.13 (D-MeX out/(under) performance)

As per Ofwat guidance this is zero until the values have been supplied by Ofwat.

### 1F.14 (Retail out/(under) performance)

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.

**1F.15 (Other exceptional items)**

We have included a 50% share of the proceeds of landsales as reported in Table 2L and the exceptional income for extreme weather events.

**1F.16 (Operational performance total)**

This is a calculated line (sum of lines 1F.10 to 1F.15).

The net amount of £43.453m for operational underperformance includes the share of an estimated £27m in respect of the adverse impact of COVID-19 on Yorkshire Water's operating costs.

This is an impact that is permanent in nature and not due to the timing of costs being incurred in 2020-25.

**1F.17 (RORE)**

This is a calculated line (sum of lines 1F.9 and 1F.16).

There has been a change to the APR this year and this value is now shown on line 4H.5.

**1F.18 (Actual performance adjustment 2015-20)**

Within Table 1F (YW) Yorkshire Water has not included an amount for actual performance in 2015-20 as this has been reported in previous performance reports during that period. Yorkshire Water believes the inclusion of an amount in this line would give an inconsistent, and potentially misleading, presentation when comparing this performance report to previous reports.

In Table 1F (Ofwat) Yorkshire Water has followed Ofwat methodology.

**1F.19 (Total earnings)**

This is a calculated line (sum of lines 1F.17 and 1F.18).

**1F.20 (RCV growth from inflation)**

This is calculated as the weighted RCV inflation, this is sourced from the "Regulatory Capital Values Update of the PR19 RCVs for publication in Spring 2021" supplied by Ofwat.

**1F.21 (Voluntary sharing arrangements)**

Is a zero value.

**1F.22 (Total shareholder return)**

This is a calculated line (sum of line 1F.19 to 1F.21).

**Dividends (lines 23-25)****1F.23 (Gross Dividend)**

The notional dividend of 4% 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.24 (Interest Received on Intercompany loans)**

We have included the value that the appointed company receives in the year on inter-company loans.

This has been deflated to 2017/2018 CPIH average prices.

**1F.25 (Retained Value)**

This is a calculated line (line 1F.22 minus 1F.23 and 1F.24).

# 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.

**Table 2A:** Segmental income statement for the 12 months ended 31 March 2021

**Table 2B:** Totex analysis for the 12 months ended 31 March 2021 – wholesale

**Table 2C:** Operating cost analysis for the 12 months ended 31 March 2021 – retail

**Table 2D:** Historic cost analysis of tangible fixed assets

**Table 2E:** Analysis of ‘grants and contributions’ for the 12 months ended 31 March 2021 – water resources, water network+ and wastewater network+

**Table 2F:** Residential retail

**Table 2I:** Revenue analysis for the 12 months ended 31 March 2021

**Table 2J:** Infrastructure network reinforcement costs for the 12 months ended 31 March 2021

**Table 2K:** Infrastructure charges reconciliation for the 12 months ended 31 March 2021

**Table 2L:** Analysis of land sales for the 12 months ended 31 March 2021

**Table 2M:** Revenue reconciliation for the 12 months ended 31 March 2021 – wholesale

**Table 2N:** Residential Retail – social tariffs

**Table 2O:** Historic cost analysis of intangible fixed assets

**Table 2A****Segmental income statement for the 12 months ended 31 March 2021**

Line description	Units	DPs	Retail House-hold	Retail non-house-hold	Water resources	Water network+	Waste-water network+	Bio-resources	Add-itional Control	Total
Revenue – price control	£m	3	67.408	-1.308	71.165	385.921	494.803	78.132	0.000	1096.121
Revenue – non price control	£m	3	0.000	0.000	0.164	0.574	0.068	0.000	0.000	0.806
Operating expenditure – excluding PU recharge impact	£m	3	-70.458	0.032						-70.426
PU opex recharge	£m	3	-2.009	0.000						-2.009
Operating expenditure – including PU recharge impact	£m	3	-72.467	0.032	-29.981	-231.389	-179.398	-35.142	0.000	-548.345
Depreciation – tangible fixed assets	£m	3	-4.311	0.000	-10.283	-98.608	-163.907	-18.624	0.000	-295.733
Amortisation – intangible fixed assets	£m	3	-1.311	0.000	-0.153	-1.921	-21.150	0.000	0.000	-24.535
PU recharge impact	£m	3	0.000	0.000	-0.595	-14.648	19.502	-2.250	0.000	2.009
Depreciation & amortisation – including PU recharge impact	£m	3	-5.622	0.000	-11.031	-115.177	-165.555	-20.874	0.000	-318.259
Other operating income	£m	3	0.018	0.000	0.072	1.393	5.707	2.047	0.000	9.237
Operating profit	£m	3	-10.663	-1.276	30.389	41.322	155.625	24.163	0.000	239.560
<b>Surface water drainage rebates</b>										
Surface water drainage rebates	£m	3								0.261

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



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

Assets have been allocated to price controls in line with the principal use rules in RAG 4. Where assets are used by more than one price control, they have been allocated to the most relevant price control and recharged in the relevant lines of Table 2A.

In particular, assets used by the 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.

Further information can be found in our Accounting Separation Methodology statement, which can be viewed on our reports webpage [here](#):

## Technical notes

We have collected £3.7m in relation to Ofwat's new innovation fund for AMP7, which has been offset by a provision within operating costs for the obligation to pay this to the competition winners. Consequently, there is £nil net profit impact to the 2020/2021 income statement.

# 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 the commentary for Table 1.

The 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 with 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. We attempt 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.

Water and sewerage charges fall into the following three categories:

## Category Business Rule applied

- 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)

We do not recognise turnover for properties which are empty, and the owner/occupier cannot be identified. 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 (CRAs) 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, our property management process 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 £659.4m (2019/2020: £627.6m) has been billed (in arrears) to customers in the year. Our measured income accrual of £72.2m (2019/2020: £63.2m) is an estimation of the amount of water and wastewater charges un-billed 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 2019/2020 the review indicated an underestimation of the measured accrual of £4.1m (2018/2019: £2.2m overestimation).

A consistent approach has been taken in this area.

**Table 2B****Totex analysis for the 12 months ended 31 March 2021 – wholesale**

Line description	Units	DPs	Water resources	Water network+	Waste-water network+	Bio-resources	Additional Control	Total
<b>Base operating expenditure</b>								
Power	£m	3	2.544	29.322	35.967	-2.198	0.000	65.635
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	-2.293	0.000	-2.293
Abstraction charges/discharge consents	£m	3	5.560	0.247	6.333	0.000	0.000	12.140
Bulk Supply/Bulk discharge	£m	3	3.885	0.000	0.000	0.000	0.000	3.885
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other operating expenditure	£m	3	9.945	166.651	120.797	38.290	0.000	335.683
Local authority and Cumulo rates	£m	3	8.047	33.353	16.295	1.343	0.000	59.038
Total base operating expenditure	£m	3	29.981	229.573	179.392	35.142	0.000	474.088
<b>Other operating expenditure</b>								
Enhancement operating expenditure	£m	3	0.000	0.000	0.006	0.000	0.000	0.006
Developer services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Total operating expenditure excluding third party services	£m	3	29.981	229.573	179.398	35.142	0.000	474.094
Third party services	£m	3	0.000	1.816	0.000	0.000	0.000	1.816
Total operating expenditure	£m	3	29.981	231.389	179.398	35.142	0.000	475.910
<b>Grants and contributions</b>								
Grants and contributions – operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 2B – Continued****Totex analysis for the 12 months ended 31 March 2021 – wholesale**

Line description	Units	DPs	Water resources	Water network+	Waste-water network+	Bio-resources	Additional Control	Total
<b>Capital expenditure</b>								
Base capital expenditure	£m	3	10.322	116.287	192.099	30.287	0.000	348.723
Enhancement capital expenditure	£m	3	3.304	11.341	27.709	0.333	0.000	42.959
Developer services capital expenditure	£m	3	0.000	23.813	17.288	0.000	0.000	41.101
Total gross capital expenditure (excluding third party)	£m	3	13.626	151.441	237.096	30.620	0.000	432.783
Third party services	£m	3	0.000	4.690	0.198	0.000	0.000	4.888
Total gross capital expenditure	£m	3	13.626	156.131	237.294	30.620	0.000	437.671
<b>Grants and contributions</b>								
Grants and contributions – capital expenditure	£m	3	0.000	13.731	11.514	0.000	0.000	25.245
Net totex	£m	3	43.607	373.789	405.178	65.762	0.000	888.336
<b>Cash expenditure</b>								
Pension deficit recovery payments	£m	3	0.262	5.528	5.911	0.772	0.000	12.473
Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Totex including cash items	£m	3	43.869	379.317	411.089	66.534	0.000	900.809

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 £437.7m against a Final Determination (FD) of £586.6m. Included within this gross expenditure is a total of £17.7m which we have classified as Atypical expenditure associated with additional costs incurred due to COVID-19 and Flood Recovery.

A total of £9.1m of these additional costs are associated with COVID-19. These have been apportioned over the price controls to reflect the same investment reasons and price control splits as the schemes that were impacted by programme delays and had additional costs. These costs were due to the new agreed safe ways of working, subsequent compensation events agreed with the partners, or for additional IT equipment to support home working following government requirements.

There is also a further £8.6m of costs which was required to repair or replace our waste water and water assets, damaged during the extreme flooding events we experienced at the end of the last AMP period, which has been claimed through our insurance and offset within our operating costs.

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Expenditure within the year relating to our Management & General (M&G) programme totals £68.5m. Enhancements to our investment category structure now means that where possible any support costs that are directly attributable to a specific price control are directly allocated (£35.6m) with only general cross business management and general costs (£33.0m) now 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 £348.7m is above the Final Determination of £328.4m with this investment supporting service improvements required to meet our performance commitment targets.

The total Enhancement capital expenditure in report year totalling £43.0m is significantly below the Final Determination of £258.2m. Due to the significant efficiencies required to deliver the WINEP and DWI quality programmes within the Final Determination funding, further work has been undertaken, by our Strategic Planning Partner Stantec, to ensure that the best overall Totex solutions are promoted which is leading to a delay on spend in this first year in comparison to the original plan, although no regulatory compliance dates have been put at risk, as we are forecasting to meet corresponding regulatory dates.

In 2020/2021 third Party services expenditure totalling £4.9m 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, 4L, 4M, 4N, 4O & 4P.

Total Developer Services capital expenditure in 2020/2021, totalling £41.1m is included within the base Final Determination of £328.4m as referenced above.

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 £25.2m has been received in the current report year through grants and contributions against a Final Determination of £19.1m.

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 2020/2021 as we set ourselves stretching upper quartile 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. Despite this we saw an increase in wholesale operating expenditure in 2020/2021:

- COVID-19 impacted our business during 2020/2021 with increased operational costs for:
  - 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.



- COVID-19 lockdowns and an extremely dry summer period caused a surge in household water demand and consumption leading to increased levels of pumping impacting energy and chemical utilisation.
- After the summer months we experienced very heavy rainfall from November 2020 through to February 2021, including storms Bella, Christoph and Darcy leading to an increase in electricity usage from managing flows in the waste water network and localised flooding impacting sewage treatment works.
- Commodity prices have continued to increase through the year. Chemical prices have increased above inflation and energy prices have also risen.
- There has been a rise in our insurance premiums this year because of sizeable claims in previous years, typically due to major weather events.
- We have invested in a transformation programme 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 Final Determination (FD).
- In addition, we have incurred legal and advisory costs in relation to the referral of the AMP7 FD to the Competition and Markets Authority (CMA).

Further explanation of significant total 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.

## Water Resources

The year-on-year increase in water resources of £1.2m (4.0%) is primarily due to increased insurance premiums and general and support (G&S) costs in relation to our transformation programme and CMA referral.

Wet weather has comparatively less impact on the water price control than wastewater and typically results in reduced demand, fewer network repairs due to more stable ground conditions, and increased treatment costs from higher turbidity levels in river sources.

Other than this, there are no significant underlying year-on-year movements in operating expenditure associated with water resources.

## Water network+

Similarly, water network+ has seen an increase in operating costs from 2019/2020 of £12.3m (5.6%) primarily due to increased insurance premiums and general and support (G&S) costs in relation to our transformation programme and CMA referral.

COVID-19 has increased operational costs as mentioned in the summary above. We have also made 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.

There has been underlying increase in costs for the water treatment upstream service due to chemical prices being in excess of general inflation. This has been compounded with an increase in chemical consumption due to increased demand as a result of COVID-19 and dry weather in the summer.

In 2019/2020, treated water distribution price control saw a slight increase in costs due to a deliberate proactive investment programme to improve leakage performance, including the insourcing of leakage detection resources. The full year impact of insourcing has led to an increase in overhead costs where headcount is used as a cost driver.

## Wastewater network+

Overall wastewater network+ saw a decrease in costs of £1.6m (0.9%) compared to 2019/20, where operational costs have benefited from preparatory investment.

At the end of AMP6 there was a drive to meet the new tougher performance commitments. Increased levels of investment were made to reduce pollution risks and improve compliance within sewage treatment. This drive prior to AMP7 has meant that there has been strong treatment works compliance in 2020/2021 and improved the cost base going forwards. Discharge permit compliance in 2020/2021 was 99.1% assisted by improved trade effluent compliance. There have been no ultraviolet failures and reduced pollution run rate from treatment works has improved. The draft annual Environmental Performance Assessment (EPA) suggest Yorkshire Water are on track for 4-star EPA status. As a result, we have seen an overall decrease in operating costs from this upstream service.

Notwithstanding the improvements in sewage treatments, operating costs in sewage collection upstream service has increased. In 2019/2020, there was 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. This proactive activity also involved insourcing the below ground sewer maintenance team. The full year impact of this change can be seen in 2020/2021 with increased staff costs as well as increased overhead costs where headcount is used as a cost driver, and the number of internal FTEs has increased with the full year effect.

The wastewater network+ price control has experienced an increase in power costs because of higher than average electricity flows due to storms through the year along with increased wholesale energy prices.

As with the water resources and water network+ price controls, wastewater network+ has seen an increase in COVID-19 related costs and G&S, for similar reasons explained above.

## Bioresources

Year-on-year we have seen an increase in the bioresources price control of £2.7m (8.3%). This is primarily due to outsource of the sludge transport function to a contractor. Due to COVID-19 implications this outsource could not take place at the beginning of the financial year and was postponed to the beginning of June 2020. Whilst this is more efficient on a totex basis than the internal provision of staff using fixed assets, the new arrangement does result in all costs being incurred in the P&L, so increasing operating costs.

Power costs have increased mainly due to reduced levels of generation. Delays in capital scheme completion for Dewsbury and Huddersfield have impacted the generation performance this financial year. The Knostrop scheme resulted in positive energy generation performance in 2019/2020, but in this financial year some defect resolution on the Combined Heat & Power (CHP) engines which resulted in two months downtime impacting generation at the beginning of the financial year.

Similar to other price controls bioresources has seen an increase in COVID-19 related costs and G&S.

## Technical notes

In 2019/2020, we presented pension costs in operating expenditure. In 2020/2021, we have presented pension costs in cash expenditure (£12.5m) rather than operating expenditure for the wholesale business. In relation to pension costs RAG 4.09 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 2020/2021 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 difference in 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. The historical pension scheme deficit recovery payments cannot be allocated between the different Kelda group entities and all cash contributions are, therefore, recognised as operating expenditure. 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, therefore excluding cash contributions in excess of the IAS 18 defined benefit pension cost from the operating expenditure.

# 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 2021 – retail**

Line description	Units	DPs	Household – total	Non-household – total	Total
<b>Operating expenditure</b>					
Customer services	£m	3	29.972	0.000	29.972
Debt management	£m	3	3.783	0.000	3.783
Doubtful debts	£m	3	26.034	-0.560	25.474
Meter reading	£m	3	1.548	0.000	1.548
Services to developers	£m	3		0.455	0.455
Other operating expenditure	£m	3	7.824	0.000	7.824
Local authority and Cumulo rates	£m	3	0.075	0.004	0.079
Total operating expenditure excluding third party services	£m	3	69.236	-0.101	69.135
<b>Depreciation</b>					
Depreciation on tangible fixed assets existing at 31 March 2015	£m	3	0.608	0.000	0.608
Depreciation on tangible fixed assets acquired after 1 April 2015	£m	3	3.703	0.000	3.703
Amortisation on intangible fixed assets existing at 31 March 2015	£m	3	0.000	0.000	0.000
Amortisation on intangible fixed assets acquired after 1 April 2015	£m	3	1.311	0.000	1.311
<b>Recharges</b>					
Recharge from wholesale for legacy assets principally used by wholesale (assets existing at 31 March 2015)	£m	3	0.068	0.000	0.068
Income from wholesale for legacy assets principally used by retail (assets existing at 31 March 2015)	£m	3	0.000	0.000	0.000
Recharge from wholesale assets acquired after 1 April 2015 principally used by wholesale	£m	3	1.941	0.000	1.941
Income from wholesale assets acquired after 1 April 2015 principally used by retail	£m	3	0.000	0.000	0.000
Net recharges costs	£m	3	2.009	0.000	2.009
Total retail costs excluding third party and pension deficit repair costs	£m	3	76.867	-0.101	76.766
Third party services operating expenditure	£m	3	0.000	0.000	0.000
Pension deficit repair costs	£m	3	1.222	0.069	1.291
Total retail costs including third party and pension deficit repair costs	£m	3	78.089	-0.032	78.057
<b>Debt written off</b>					
Debt written off	£m	3	19.922	2.390	22.312
<b>Capital expenditure</b>					
Capital expenditure	£m	3	4.774	0.000	4.774

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

## Table 2C – Continued

### Cost analysis for the 12 months ended 31 March 2021 – retail

Line description	Units	DPs	Household – total	Non-household – total	Total
<b>Other operating expenditure includes the net retail expenditure for the following household retail activities which are part funded by wholesale</b>					
Demand-side water efficiency – gross expenditure	£m	3	0.333		
Demand-side water efficiency – expenditure funded by wholesale	£m	3	0.333		
Demand-side water efficiency – net retail expenditure	£m	3	0.000		
Customer-side leak repairs – gross expenditure	£m	3	3.409		
Customer-side leak repairs – expenditure funded by wholesale	£m	3	3.403		
Customer-side leak repairs – net retail expenditure	£m	3	0.006		

### 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 on-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 two years and these rates are then applied to the debts outstanding at the end of the aged accounting period 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 £52.8m is held at 31 March 2021 (31 March 2019: £49.9m). The main elements of the provision are as follows:

- £31.1m unmeasured household debtor provision (direct billing). Calculated using information based on the age of debts.
- £18.0m measured household debtor provision. Calculated using information based on the age of debts.

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- £2.4m 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 higher than expected billed debtors, which are attributed to increased and sustained household consumption during the COVID-19 pandemic by measured 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 2C further breaks down the retail operating costs included in Table 2A into cost categories.

## Household retail operating costs

Compared to 2019/2020, household (HH) retail operating costs including third party services and pension deficit repair costs have increased by £4.9m to £70.5m in 2020/2021. The reasons for the variance are:

- Increase in doubtful debts due to a higher household bad debt provision. This reflects increased household arrears due to increased and sustained household consumption during the COVID-19 pandemic by metered customers during periods of lockdown when households were encouraged, to work from home. The increased arrears are marginally offset by increased write-offs actioned in the year on schemes to assist certain customers to pay their bills (Fresh Start scheme and the new Direct Support scheme which commenced in 2020/2021).
- Increase in customer service costs due to increased group costs relating to general and support (G&S) as well as increased billing services costs at Loop. The higher billing service costs is to meet the challenges set by PR19 on Void and Gap sites with challenging targets to reduce the number of empty properties on the billing file and reduce the time taken to resolve properties missing from the billing file. Loop has increased its data services and field services to identify property occupiers and office resource to process the returns. Whilst this has increased billed income it has also increased billing costs. Overall, however Loop costs are in line with 2019/2020 with other favourable costs variances offsetting this increase.
- Included within retail operating costs is £1.2m of exceptional costs in relation to increased COVID-19 costs and costs related

to the transformation programme across the business which has identified efficiencies and will allow us to make a step change in performance over the AMP to meet our stretching Final Determination (FD).

## Non-household retail operating costs

The non-household (NHH) part of the business was disposed of during 2019/2020 and so there has been a decrease in costs in 2020/2021. The price control continues to incur operational costs in the following areas:

- Doubtful debts have decreased by £6.7m from a cost of £6.1m in 2019/2020 to a net £0.6m credit in 2020/2021. The majority of this decrease relates to 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. The non-household doubtful debts charge is based on bad debt provision and write-offs actioned during the year.
- Developer services has decreased by £0.5m to £0.5m. The majority of this decrease is attributable to a bottom up review of the capitalisation of employee related costs and rechargeable works recharges in the year. This review resulted in an increase in recharges to capital and rechargeable works and a reduction of costs in the NHH price control.
- In addition, we are seeing the full year impact of the reduction in overheads allocation following the exit from the non-household retail market in October 2019.

## Technical notes

We have presented pension costs for retail (£1.3m) in 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. The historical pension scheme deficit recovery payments cannot be allocated between the different Kelda group entities and all cash contributions are, therefore, recognised as operating expenditure. The treatment contrasts to most other WASCs who have adopted IFRS and are required to follow defined benefit pension scheme accounting, therefore excluding cash contributions in excess of the IAS 18 defined benefit pension cost from the operating expenditure.

**Table 2D****Historic cost analysis of tangible fixed assets at 31 March 2021**

Line description	Units	DPs	Retail House-hold	Retail non-house-hold	Water resources	Water network+	Waste-water network+	Bio-resources	Add-itional Control	Total
<b>Cost</b>										
At 1 April 2020	£m	3	44.962	12.441	379.303	4670.360	5259.150	581.177	0.000	10947.393
Disposals	£m	3	-1.988	0.000	-24.711	-58.790	-118.230	-9.543	0.000	-213.262
Additions	£m	3	1.921	0.000	12.277	124.793	268.772	17.120	0.000	424.883
Adjustments	£m	3	0.142	-12.441	8.266	98.958	131.630	0.097	0.000	226.652
Assets adopted at nil cost	£m	3	0.000	0.000	0.000	0.000	14.603	0.000	0.000	14.603
At 31 March 2021	£m	3	45.037	0.000	375.135	4835.321	5555.925	588.851	0.000	11400.269
<b>Depreciation</b>										
At 1 April 2020	£m	3	-30.110	-7.469	-78.976	-1642.942	-1305.230	-175.509	0.000	-3240.236
Disposals	£m	3	1.988	0.000	24.710	58.791	110.090	9.556	0.000	205.135
Adjustments	£m	3	0.000	7.469	0.000	0.000	-7.469	0.000	0.000	0.000
Charge for year	£m	3	-4.311	0.000	-10.283	-98.608	-163.907	-18.624	0.000	-295.733
At 31 March 2021	£m	3	-32.433	0.000	-64.549	-1682.759	-1366.516	-184.577	0.000	-3330.834
Net book amount at 31 March 2021	£m	3	12.604	0.000	310.586	3152.562	4189.409	404.274	0.000	8069.435
Net book amount at 1 April 2020	£m	3	14.852	4.972	300.327	3027.418	3953.920	405.668	0.000	7707.157
<b>Depreciation charge for year</b>										
Principal services	£m	3	-4.311	0.000	-10.283	-98.608	-163.907	-18.624	0.000	-295.733
Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	£m	3	-4.311	0.000	-10.283	-98.608	-163.907	-18.624	0.000	-295.733

The net book value includes £531.671m in respect of assets in the course of construction.

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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 2021 amounts to £8,069.4m, an increase of £362.2m since the start of the year. This movement includes:

- Fixed asset additions during the year of £424.9m, which is slightly below that in 2019/2020 (£456.7m) partly due to the impact of the CMA process on investment decisions and also due to the effect of COVID-19 on site working practices.
- Adjustments include an upward valuation of £217.0m infrastructure assets, along with a reclassification of assets from retail non-household to wholesale.
- Assets adopted at nil cost are valued at £14.6m, an increase of £2.9m compared to 2019/2020 due to increased sewer adoptions in the year.
- The depreciation charge for the year is £295.7m. This is lower than the previous year due to higher accelerated depreciation of replaced assets in that year.
- Disposals in the year total £8.1m, largely of assets with zero net book value. This includes £7.2m 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 £217.0m, we have seen an increase in 2020/2021 in Table 2D.

**Table 2E**

**Analysis of 'grants and contributions' for the 12 months ended 31 March 2021 – 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
<b>Grants and contributions – water resources</b>						
Diversions – sl85	£m	3	0.000	0.000	0.000	0.000
Other contributions (price control)	£m	3	0.000	0.000	0.000	0.000
Price control grants and contributions	£m	3	0.000	0.000	0.000	0.000
Diversions – NRSWA	£m	3	0.000	0.000	0.000	0.000
Diversions – other non-price control	£m	3	0.000	0.000	0.000	0.000
Other contributions (non-price control)	£m	3	0.000	0.000	0.000	0.000
Total	£m	3	0.000	0.000	0.000	0.000
Value of adopted assets	£m	3	0.000	0.000		0.000
<b>Grants and contributions – water network+</b>						
Connection charges	£m	3	0.000	5.817	0.000	5.817
Infrastructure charge receipts	£m	3	0.000	1.150	0.000	1.150
Requisitioned mains	£m	3	0.000	5.123	0.000	5.123
Diversions – sl85	£m	3	0.000	-0.076	0.000	-0.076
Other contributions (price control)	£m	3	0.000	-0.019	0.000	-0.019
Price control grants and contributions before deduction of income offset	£m	3	0.000	11.995	0.000	11.995
Income offset	£m	3	0.000	0.548	0.000	0.548
Price control grants and contributions after deduction of income offset	£m	3	0.000	11.447	0.000	11.447
Diversions – NRSWA	£m	3	0.000	2.224	0.000	2.224
Diversions – other non-price control	£m	3	0.000	-0.004	0.000	-0.004
Other contributions (non-price control)	£m	3	0.000	0.064	0.000	0.064
Total	£m	3	0.000	13.731	0.000	13.731
Value of adopted assets	£m	3	0.000	0.000		0.000

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## Table 2E – Continued

Analysis of 'grants and contributions' for the 12 months ended 31 March 2021 – 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
<b>Grants and contributions – wastewater network+</b>						
Receipts for on-site work	£m	3	0.000	1.144	0.000	1.144
Infrastructure charge receipts	£m	3	0.000	1.926	0.000	1.926
Diversions – s185	£m	3	0.000	8.711	0.000	8.711
Other contributions (price control)	£m	3	1.772	0.000	0.000	1.772
Price control grants and contributions before deduction of income offset	£m	3	1.772	11.781	0.000	13.553
Income offset	£m	3	0.000	0.000	0.000	0.000
Price control grants and contributions after deduction of income offset	£m	3	1.772	11.781	0.000	13.553
Diversions – NRSWA	£m	3	0.000	-0.267	0.000	-0.267
Diversions – other non-price control	£m	3	0.000	0.000	0.000	0.000
Other Contributions (non-price control)	£m	3	0.000	0.000	0.000	0.000
Total	£m	3	1.772	11.514	0.000	13.286
Value of adopted assets	£m	3	0.000	14.603		14.603
Line description	Units	DPs	Water resources	Water network+	Waste-water network+	Total
<b>Movements in capitalised grants and contributions</b>						
b/f	£m	3	0.000	179.718	287.553	467.271
Capitalised in year	£m	3	0.000	13.731	11.514	25.245
Amortisation (in income statement)	£m	3	0.000	-5.718	-4.378	-10.096
c/f	£m	3	0.000	187.731	294.689	482.420

Income totalling £25.2m has been received in the current report year through grants and contributions against a Final Determination (FD) of £19.1m.

Grants and contributions associated with the wholesale water programme in the current report year total £13.7m which is higher than the Final Determination of £11.2m. Further detail of the how this income is split is explained below:

A total of £5.8m has been received from developers for s45 new connections against an FD allowance of £6.3m. This is due to a lower number of actual connection requests from developers in comparison to the number used to calculate the FD allowance.

Water infrastructure charge receipts totalling £1.2m have been received in year which is in line with the FD allowance £1.2m.

A total of £5.1m of income on requisitioned water mains, in comparison with FD allowance of £1.0m, has been received due to an increase in requests compared to the level of activity used to calculate the FD allowance.

The remaining income on the water programme relates to income received due to requests to divert our water mains assets which totals £2.1m in the current report year. This includes an adjustment of -£0.1m for s185 diversion requests completed where the final account has resulted in a repayment of income previously received for diverting water mains situated in private land.

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The FD allowance in the report year for this activity was £2.7m but due to the pandemic very few diversion enquiries have been received resulting in no new requests being started in the current year. There is also a total of £2.2m 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 with the expenditure reported in Table 4D as Third party services.

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 £11.5m which is higher than the Final Determination of £7.9m. Further detail of the how this income is split is provided below:

A total of £1.1m is with regards to income on requisitioned sewers in comparison with FD allowance of £1.8m, due to a reduction in requests from the level of activity used to calculate the FD allowance.

Wastewater infrastructure charge receipts totalling £1.9m have been received in year which is significantly lower than the FD allowance of £5.1m.

The remaining income on the wastewater programme relates to income received due to requests to divert our sewers which totals £8.4m in the current report year. This income is identified within this table as £8.7m for 185 diversion requests received for diverting sewers situated in private land against an FD allowance of £1.0m, again reflecting an increase in the actual level of requests from the level used to calculate the FD allowance. There is an adjustment of £-£0.3m for diverting our sewers as part of NRSWA (New Roads and Street Works Act 1991) requests completed where the final account has resulted in a repayment of income previously received and reported. 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.

Following the conclusion of the year end process a further investigation of capital schemes identified income amounts, totalling £0.2m, relating to two schemes which were incorrectly coded and no income had been received. These were raised with our external auditors (Atkins) and it was agreed that in order to correctly report the net capital expenditure position these amounts should be excluded from regulatory reporting tables.

**Table 2F****Residential retail for the 12 months ended 31 March 2021**

Line description	Revenue	Number of customers	Average residential revenues
Units DPs	£m 3	000s 3	£ 3
<b>Residential revenue</b>			
Wholesale charges	822.474		
Retail revenue	67.408		
Total residential revenue	889.882		
<b>Retail revenue</b>			
Revenue Recovered ("RR")	67.408		
Revenue sacrifice	2.000		
Actual revenue (net)	69.408		
<b>Customer information</b>			
Actual customers ("AC")		2214.125	
Reforecast customers		2200.410	
<b>Adjustment</b>			
Allowed revenue ("R")	68.701		
Net adjustment	-0.707		
<b>Other residential information</b>			
Average residential retail revenue per customer			31.348

Table 2F is a new addition to the APR in 2020/2021 and focuses on the recovery of the household retail revenue against the CMA FD19 allowance.

The over recovery of retail revenue will be reconciled within the Residential retail reconciliation model and any adjustment will be made as part of the PR24 process.

Total revenue received from household customers for the year 2020/2021 was £889.9m compared to £814.9m in 2019/2020, an increase of £75.0m (9.2%). This increase is mainly attributable to allowed inflationary increases and increased consumption due to COVID-19 lockdown and weather.

- Total household wholesale revenue received in 2020/2021 was £822.5m compared to £748.8m for 2019/2020, an increase of £73.7m (9.8%).
- Total household retail revenue received in 2020/2021 was £67.4m compared to £66.1m for 2019/2020, an increase of £1.3m (2.0%).

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**Table 21**  
**Revenue analysis for the 12 months ended 31 March 2021**

Line description	Units	DPs	Household	Non-household	Total	Water resources	Water network+	Total
<b>Wholesale charge - water</b>								
Unmeasured	£m	3	180.715	1.012	181.727	31.007	150.720	181.727
Measured	£m	3	178.362	95.243	273.605	40.158	233.447	273.605
Third party revenue	£m	3	0.000	1.754	1.754	0.000	1.754	1.754
Total wholesale water revenue	£m	3	359.077	98.009	457.086	71.165	385.921	457.086
Line description	Units	DPs	Household	Non-household	Total	Waste-water network+	Bio-resources	Total
<b>Wholesale charge - wastewater</b>								
Unmeasured - foul charges	£m	3	163.381	1.345	164.726	130.323	34.403	164.726
Unmeasured - surface water charges	£m	3	40.008	0.755	40.763	39.897	0.866	40.763
Unmeasured - highway drainage charges	£m	3	16.570	0.105	16.675	16.379	0.296	16.675
Measured - foul charges	£m	3	183.721	89.543	273.264	232.199	41.065	273.264
Measured - surface water charges	£m	3	40.920	11.838	52.758	51.553	1.205	52.758
Measured - highway drainage charges	£m	3	18.797	5.177	23.974	23.677	0.297	23.974
Third party revenue	£m	3	0.000	0.775	0.775	0.775	0.000	0.775
Total wholesale wastewater revenue	£m	3	463.397	109.538	572.935	494.803	78.132	572.935
<b>Wholesale charge - Additional Control</b>								
Unmeasured	£m	3	0.000	0.000	0.000			
Measured	£m	3	0.000	0.000	0.000			
Total wholesale additional control revenue	£m	3	0.000	0.000	0.000			
Wholesale Total	£m	3	822.474	207.547	1030.021			
<b>Retail revenue</b>								
Unmeasured	£m	3	28.306	-0.108	28.198			
Measured	£m	3	39.102	-2.989	36.113			
Other third party revenue	£m	3	0.000	1.789	1.789			
Retail Total	£m	3	67.408	-1.308	66.100			
<b>Third party revenue - non-price control</b>								
Bulk supplies - water	£m	3			0.164			
Bulk supplies - wastewater	£m	3			0.000			
Other third party revenue	£m	3			0.574			

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## Table 21 – Continued

### Revenue analysis for the 12 months ended 31 March 2021

Line description	Units	DPS	Household	Non-household	Total	Waste-water network+	Bio-resources	Total
<b>Principal services – non-price control</b>								
Other appointed revenue	£m	3			0.068			
Total appointed revenue	£m	3			1096.927			

The increase in appointed revenue to £1,096.9m (2019/2020: £1,057.2m) is due to:

Total wholesale and retail revenue received from household customers for the year 2020/2021 was £889.9m, compared to £814.9m in 2019/2020, an increase of £75.0m (9.2%). This increase is mainly attributable to allowed inflationary increases and increased consumption due to weather and the COVID-19 lockdown:

- Household unmeasured income increased by £9.8m to £429.0m (2019/2020: £419.2m)
- Household measured income increased by £65.2m to £460.9m (2019/2020: £395.7m)

Total wholesale revenue received from non-household customers decreased by £24.9m to £205.0m in 2020/2021 (2019/2020: £229.9m), mainly due to reduced consumption throughout the COVID-19 lockdowns:

- Non household wholesale measured income decreased by £24.6m to £201.8m (2019/2020: £226.4m)
- Non household wholesale unmeasured income decreased by £0.3m to £3.2m (2019/2020: £3.5m).

Total retail non-household revenue has decreased from 2019/20 and reflects an overall £1.3m negative revenue adjustment:

- Following the sale of the Yorkshire Water non household retail (NHHR) customer base to Scottish Water Business Stream Ltd (SWBS), effective 1 October 2019, Three Sixty Water (TSW) have continued to provide customer and billing services to the Yorkshire base and have issued all invoices under the SWBS trading name.
- An apportionment for historic supply/ billing periods under Yorkshire Water ownership has been made within the billing system to record revenue, cash transactions and debtors separately to periods under SWBS ownership.
- Prior to the sale, extensive system development work was undertaken to build this 'dual brand' billing capability and to ensure billing was correctly made to SWBS or TSW. As part of this activity, a review of historic customer billings identified some correcting adjustments and a negative revenue adjustment was made in Yorkshire Water's accounts, offset by an equal and opposite adjustment to SWBS.

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**Table 2J****Infrastructure network reinforcement costs for the 12 months ended 31 March 2021**

Line description	Units	DPs	Network reinforcement capex	On site/site specific capex (memo only)
<b>Wholesale water network+ (treated water distribution)</b>				
Distribution and trunk mains	£m	3	4.523	0.000
Pumping and storage facilities	£m	3	-0.381	0.000
Other	£m	3	0.008	0.000
Total	£m	3	4.150	0.000
<b>Wholesale wastewater network+ (sewage collection)</b>				
Foul and combined systems	£m	3	1.874	0.000
Surface water only systems	£m	3	0.000	0.000
Pumping and storage facilities	£m	3	0.000	0.000
Other	£m	3	0.000	0.000
Total	£m	3	1.874	0.000

Water network reinforcement expenditure totalling £4.2m has been reported in the current report year. This is made up of investment of £4.5m on our distribution and trunk mains network at various sites with mains schemes in the current report year at Farnley, Water Lane, Holbeck, Leeds, Willerby and Kirkella, Menston and various sites in and around the Harrogate area. There is also a small adjustment of £0.4m reduction made on previously reported investment on our water pumping storage facilities to reflect contractor efficiencies on completion of a scheme at Sneaton Castle SRE.

Wastewater network reinforcement expenditure totalling £1.9m has been reported in the current report year. This is due to an investment of £1.9m on our foul and combined sewer system at Waverley for the continuation of a project started last year.

Further detail of the impact this and future planned investment will have on the changes to the wastewater connection charge going forward are reported in the commentary for Table 2K.

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**Table 2K****Infrastructure charges reconciliation for the 12 months ended 31 March 2021**

Line description	Units	DPs	Water	Wastewater	Total
<b>Impact of infrastructure charge discounts</b>					
Infrastructure charges	£m	3	1.150	1.926	3.076
Discounts applied to infrastructure charges	£m	3	0.000	0.575	0.575
Gross Infrastructure charges	£m	3	1.150	2.501	3.651
<b>Comparison of revenue and costs</b>					
Variance brought forward	£m	3	1.789	6.309	8.098
Revenue	£m	3	1.150	1.926	3.076
Costs	£m	3	-4.150	-1.874	-6.024
Variance carried forward	£m	3	-1.211	6.361	5.150

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 £4.2m is greater than the level of activity identified in the Final Determination for the current report year. As the change in charge is impacted by the current forecast five-year average from 2018, then our water infrastructure charge for 2020/2021 of £70 has increased to £75 for 2021/2022.

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 £1.9m is much lower than the level of activity identified in the Final Determination for the current report year. As the change in charge is impacted by the current forecast five-year average from 2018 then our wastewater infrastructure charges for 2020/2021 as £50 for Foul and £140 for Surface Water, have increased to £55 for Foul and £150 for Surface Water for 2021/2022. 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.

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**Table 2L****Analysis of land sales for the 12 months ended 31 March 2021**

Line description	Units	DPs	Water resources	Water network+	Wastewater network+	Total
Proceeds from disposals of protected land	£m	3	0.011	0.739	0.144	0.894

The increase in land sales is primarily associated with the sales of telecommunication masts at various clean water sites.

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 2M****Revenue reconciliation for the 12 months ended 31 March 2021 – wholesale**

Line description	Units	DPs	Water resources	Water network+	Waste-water network+	Bio-resources	Additional price control	Total
<b>Revenue recognised</b>								
Wholesale revenue governed by price control	£m	3	71.165	385.921	494.803	78.132	0.000	1030.021
Grants & contributions (price control)	£m	3	0.000	11.447	13.553			25.000
Total revenue governed by wholesale price control	£m	3	71.165	397.368	508.356	78.132	0.000	1055.021
<b>Calculation of the revenue cap</b>								
Allowed wholesale revenue before adjustments (or modified by CMA)	£m	3	69.119	378.340	498.408	76.370	0.000	1022.237
Allowed grants & contributions before adjustments (or modified by CMA)	£m	3	0.000	11.372	8.013	0.000	0.000	19.385
Revenue adjustment	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other adjustments	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Revenue cap	£m	3	69.119	389.712	506.421	76.370	0.000	1041.622
<b>Calculation of the revenue imbalance</b>								
Revenue cap	£m	3	69.119	389.712	506.421	76.370	0.000	1041.622
Revenue Recovered	£m	3	71.165	397.368	508.356	78.132	0.000	1055.021
Revenue imbalance	£m	3	-2.046	-7.656	-1.935	-1.762	0.000	-13.399

Table 2M calculates the revenue performance within the 4-wholesale price controls against the revenue allowances as set by the CMA FD19.

We have used an internal model to provide the split between lines 2M.4 – Allowed wholesale revenue before adjustments (or modified by CMA) and 2M.5 – Allowed grants & contributions before adjustments (or modified by CMA).

Whilst we have reported the actual values in Table 2M in line with the Ofwat guidance we would like to make an adjustment to Water Networks grants and contributions to reflect the financial remedies Yorkshire Water made to a number of developer services customers

who had been adversely impacted by the inaccuracies we made to new connections quotations issued between April 2018 and November 2019.

Impacted customers were reimbursed by the value of the excess of the quote settled plus payments were made in lieu of interest lost. We informed the customers who had been impacted and consulted Ofwat about our investigation and plans for making remedies.

The impact of the refunds was £0.988m, this adjustment increases the over recovery of revenue in Water Networks + to £8.644m.

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Water resources price control**

The received wholesale water resources revenue recovered for 2020/2021 is £71.165m compared to that assumed at the Final Determination of £69.119m, a difference of £2.046m – 2.96%.

**Water networks+ price control**

The received wholesale water network+ revenue recovered for 2020/2021, after the adjustment, is £398.356m compared to that assumed at the Final Determination of £389.712m, a difference of £8.644m – 2.22%.

**Wholesale wastewater network+ price control**

The actual wholesale wastewater network+ revenue recovered for 2020/2021 is £508.356m compared to that assumed at the Final Determination of £506.421m, a difference of £1.935m – 0.38%.

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 2020/2021 is £78.132m compared to that assumed at the Final Determination of £76.370m, a difference of £1.762m – 2.31%.

This variance will be considered for the 2022/2023 revenue allowance through the Bioresources revenue reconciliation mode.

**Table 2N****Residential retail – social tariffs**

Line description	Revenue	Number of customers	Average amount per customer
Units DPs	£m 3	000s 3	£ 3
<b>Number of residential customers on social tariffs</b>			
Residential water only social tariffs		0.088	0.000
Residential wastewater only social tariffs		0.413	0.000
Residential dual service social tariffs		23.666	0.000
<b>Number of residential customers not on social tariffs</b>			
Residential water only no social tariffs		110.793	0.000
Residential wastewater only no social tariffs		115.410	0.000
Residential dual service no social tariffs		1963.741	0.000
<b>Social tariff discount</b>			
Average discount per water only social tariffs customer			90.909
Average discount per wastewater only social tariffs customer			130.751
Average discount per dual service social tariffs customer			213.682
<b>Social tariff cross-subsidy – residential customers</b>			
Total customer funded cross-subsidies for water only social tariffs customers	0.005		
Total customer funded cross-subsidies for wastewater only social tariffs customers	0.033		
Total customer funded cross-subsidies for dual service social tariffs customers	3.081		
Average customer funded cross-subsidy per water only social tariffs customer			0.045
Average customer funded cross-subsidy per wastewater only social tariffs customer			0.285
Average customer funded cross-subsidy per dual service social tariffs customer			1.550
<b>Social tariff cross-subsidy – company</b>			
Total revenue forgone by company to fund cross-subsidies for water only social tariffs customers	0.003		
Total revenue forgone by company to fund cross-subsidies for wastewater only social tariffs customers	0.021		
Total revenue forgone by company to fund cross-subsidies for dual service social tariffs customers	1.976		
Average revenue forgone by company to fund cross-subsidy per water only social tariffs customer			34.091
Average revenue forgone by company to fund cross-subsidy per wastewater only social tariffs customer			50.847
Average revenue forgone by company to fund cross-subsidy per dual service social tariffs customer			83.495
<b>Social tariff support – willingness to pay</b>			
Level of support for social tariff customers reflected in business plan			4.000
Maximum contribution to social tariffs supported by customer engagement			4.700

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Table 2N is a new addition to the APR in 2020/2021 and focuses on the WaterSupport tariff that Yorkshire Water offers as it's social tariff.

The WaterSupport tariff is accessed by customers on low income and the charges are set to be in line with the industry wide Water Sure tariff.

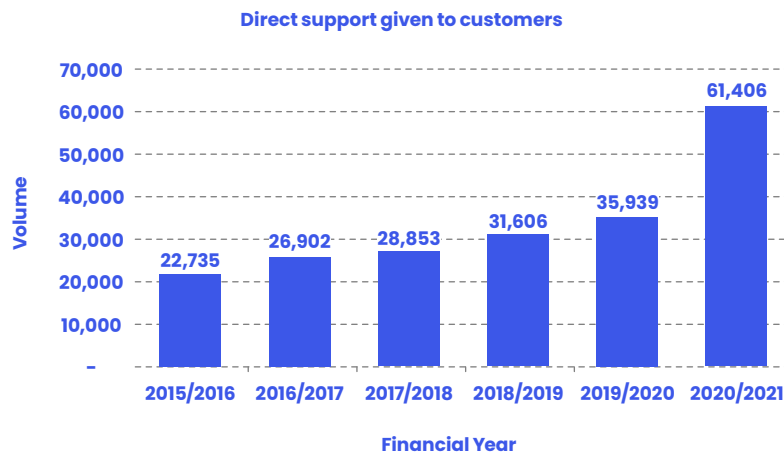
Within our PR19 business plan submission we committed to a revenue sacrifice of £2m to assist in the financing of the WaterSupport tariff, this is shown in our 'total revenue forgone by company' lines (2N.16–2N.18).

We have several additional support schemes for customers and the number of customers that we help in the year are reported within our performance commitment, Direct support given to customers.

The number of customers supported has increased on a yearly basis throughout the period.

This year's performance has seen an increase by over 70% on the previous year with an additional 25,000 customers, receiving direct support. This has taken the total to 61,406.

Of all the schemes, WaterSupport, a social tariff aimed at customers with low incomes, has the largest number of customers for 2020/2021 and accounts for circa 44% of the total customer helped.





**Table 20****Historic cost analysis of intangible fixed assets**

Line description	Units	DPs	Water Resources	Water network+	Waste-water network+	Bio-resources	Add-itional Control	Retail Resi-dential	Retail non-house-hold	Total
<b>Cost</b>										
At 1 April 2020	£m	3	2.921	26.802	186.418	0.000	0.000	3.528	0.000	219.669
Disposals	£m	3	0.000	-17.933	-1.097	0.000	0.000	0.000	0.000	-19.030
Additions	£m	3	0.157	2.990	16.605	0.000	0.000	2.965	0.000	22.717
Adjustments	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Assets adopted at nil cost	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
At 31 March 2021	£m	3	3.078	11.859	201.926	0.000	0.000	6.493	0.000	223.356
<b>Amortisation</b>										
At 1 April 2020	£m	3	-0.130	-19.001	-42.219	0.000	0.000	-0.582	0.000	-61.932
Disposals	£m	3	0.000	17.933	1.097	0.000	0.000	0.000	0.000	19.030
Adjustments	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Charge for year	£m	3	-0.153	-1.921	-21.150	0.000	0.000	-1.311	0.000	-24.535
At 31 March 2021	£m	3	-0.283	-2.989	-62.272	0.000	0.000	-1.893	0.000	-67.437
Net book amount at 31 March 2021	£m	3	2.795	8.870	139.654	0.000	0.000	4.600	0.000	155.919
Net book amount at 1 April 2020	£m	3	2.791	7.801	144.199	0.000	0.000	2.946	0.000	157.737
<b>Amortisation for year</b>										
Principal services	£m	3	-0.153	-1.921	-21.150	0.000	0.000	-1.311	0.000	-24.535
Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	£m	3	-0.153	-1.921	-21.150	0.000	0.000	-1.311	0.000	-24.535

The net book value includes £45.368m in respect of assets in the course of construction.

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Table 20 analyses changes in the intangible fixed assets of both wholesale and retail activities of Yorkshire Water.

Our accounting policies in relation to intangible 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 2021 amounts to £155.9m, a decrease of £1.8m since the start of the year. This movement includes:

- Additions of £22.7m, the additions figure in 2020/2021 is slightly lower than that in 2019/2020 (£32.0m) due to the completion of the SAP software implementation project in 2019/2020.
- Amortisation in the year is £24.5m, an increase of £9.4m on 2019/2020 due to a full year of amortisation of the new SAP software system and other software year additions in the previous and current years.
- Disposals in the year include asset-life expired software and the goodwill relating to the acquisition of York Waterworks which has now been fully amortised.

# Table 3:

# Performance

# summary

## Introduction

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

**Table 3A:** Outcome performance – Water performance commitments (financial)

**Table 3B:** Outcome performance – Wastewater performance commitments (financial)

**Table 3C:** Customer measure of experience (C-MeX) table

**Table 3D:** Developer services measure of experience (D-MeX) table

**Table 3E:** Outcome performance – Non financial performance commitments

**Table 3F:** Underlying calculations for common performance commitments – water and retail

**Table 3G:** Underlying calculations for common performance commitments – wastewater

**Table 3H:** Summary information on outcome delivery incentive payments

**Table 3I:** Supplementary outcomes information

# Atkins technical assurance statement

## Assurance Statement for Yorkshire Water's 2020/2021 Annual Performance Report

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 2020/2021. We presented our findings to Yorkshire Water's Regulation Team on 3rd June 2021, the Regulatory Issues Group on 23rd June 2021 and the Yorkshire Water Audit and Risk Committee on 7th July 2021. 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 2020/2021 Annual Performance Report and regulatory reporting to other bodies (e.g. CC Water, Water UK, Drinking Water Inspectorate).

### The areas in scope for this 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 60 video enabled meetings, due to the COVID-19 pandemic, from April to June 2021, 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 first report year of AMP7 there are some new Performance Commitments and Ofwat has made a large number of changes to its Regulatory Accounting Guidelines (RAGs) where the definitions and reporting format for all annual reporting are defined. 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. 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 and is improved going forward.

In our mid-year review of methodologies and based upon our discussions with the other consultants on the assurance framework, we can see that considerable progress has been made on the methodologies, documentation and supporting evidence for AMP7 ODI reporting. This was confirmed in our consideration of reporting methodologies and their application in our APR21 audits.

We have seen a positive audit process, with challenge embraced and responded to rapidly. There is still further work to do, but we have seen a real continuing improvement culture. We traced reported data back to data sources and information systems. There were 39 changes to methodology and/or reported data which were all addressed prior to submission, which 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 and the data tables we assure, 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:

- Significant water supply events
- Internal sewer flooding
- External sewer flooding
- Sewer collapses
- Integrated catchment management
- Capital carbon and emissions arising from owned land
- Renewable energy generation

We believe that the published metrics provide a fair and reasonable account of Yorkshire Water's performance in 2020/2021 relative to its Performance Commitment targets. 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 Chief Strategy and Regulation Officer's regulation team and the cooperation of the people responsible for preparing and reporting the 2020/2021 APR and other regulatory submissions.



**Jonathan Archer**

Atkins Regulation Director

Lead Technical Assurer to Yorkshire Water

## 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.

## AMP7 Performance Commitments

Table 0-1 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
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	Green
3A.14 Low pressure	Green	Green
3A.15 Repairing or replacing customer owned pipes	Green	Green
3B.1 Internal sewer flooding	Green	Amber
3B.2 Pollution incidents	Green	Green
3B.3 Sewer collapses	Amber	Amber
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	Amber
3B.9 Bathing water quality	Green	Green
3B.10 Surface water management	Green	Green
3B.11 Quality agricultural products	Green	Green
3C C-MeX score and total household complaints	Green	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		
3E.2 PSR reach	Green	Green
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	Amber
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
3E.14 Priority services satisfaction	Green	Green
3E.15 Inclusive customer service	Green	Green
3E.16 Renewable energy generation	Green	Amber
3E.17 WINEP Delivery	Green	Green



## Reporting of Additional Regulatory Information

We have reviewed other data reported and highlighted, on an exception basis, areas of note encountered. There includes regulatory reporting to Ofwat, the EA, DWI, Water UK and CC Water.

**Table 0-2 Areas of note encountered during audit of additional regulatory information tables**

Submission	Methodology	Data
4Q.13-14 Length of new mains (km) Requisitions and SLPs	Amber	Green
Table 4R Line 27 Non-resident population	Green	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
6D.11-14 Meters supply demand balance benefits	Green	Amber
7C.5 Sewer Blockages	Green	Amber
7D.25 Additional volume of storage at CSOs, etc to reduce spill frequency	Amber	Green
7B.1-9 Large works classification 7D.1-16 Number of works in each size band and loads received by different size bands	Amber	Green
Table 8C.2-6 (Column B-E), 15,16 – Bio Energy & Liquors	Amber	Amber
Bioresources Market Information Table 4 – Sludge Treatment Centres Section A – K and L – O	Amber	Green

**Table 3A****Outcome performance – Water performance commitments (financial)**

Line description	Unique reference	Unit	Decimal places	Performance level – actual		PCL met?	Outperformance or underperformance payment	Forecast of total 2020 – 25 outperformance or underperformance payment
				Previous reporting year	Current reporting year		£m	£m
Common PCs – Water (Financial)								
Water quality compliance (CRI)	PRI9YKY_20	number	2	0.05	2.34	No	-0.417	-0.417
Water supply interruptions	PRI9YKY_21	hh:mm:ss	0	00:07:34	00:07:14	No	-0.909	-0.909
Leakage	PRI9YKY_22	%	1	n/a	3.5	Yes	0.056	0.056
Per capita consumption	PRI9YKY_25	%	1	n/a	-3.4	No	-1.643	-1.643
Mains repairs	PRI9YKY_24	number	1	194.5	215.8	No	-3.29	-3.29
Unplanned outage	PRI9YKY_23	%	2	5.25	3.87	Yes	0.000	0.000
Bespoke PCs – Water and Retail (Financial)								
Working with others	PRI9YKY_1	nr	0	11	7	Yes	0.000	0.000
Land conserved and enhanced	PRI9YKY_2	nr	0	n/a	3084	Yes	0.000	0.000
Education	PRI9YKY_7	nr	0	n/a	5,590	No	-0.029	-0.029
Gap sites	PRI9YKY_17	%	0	n/a	19	No	-1.122	-1.122
Managing void properties	PRI9YKY_18	%	2	n/a	4.73	No	-0.832	-0.832
Drinking water contacts	PRI9YKY_26	nr	1	n/a	10.5	Yes	0.922	0.922
Significant water supply events	PRI9YKY_27	nr	0	n/a	19	No	-1.325	-1.325
Low pressure	PRI9YKY_28	nr	0	14	12	Yes	0.000	0.000
Repairing or replacing customer owned pipes	PRI9YKY_29	nr	0	n/a	3850	No	-1.361	-1.361

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**Table 3B****Outcome performance – Wastewater performance commitments (financial)**

Line description	Unique reference	Unit	Decimal places	Performance level – actual		PCL met?	Outperformance or underperformance payment	Forecast of total 2020 – 25 outperformance or underperformance payment
				Previous reporting year	Current reporting year		£m	£m
Common PCs – Wastewater (Financial)								
Internal sewer flooding	PRI9YKY_31	Number of internal sewer flooding incidents per 10,000 sewer connection	2	4.86	3.34	No	-9.025	-9.025
Pollution incidents	PRI9YKY_30	Pollution incidents per 10,000 km of sewer length	2	36.47	24.00	Yes	0.222	0.222
Sewer collapses	PRI9YKY_33	Number of sewer collapses per 1,000 km of all sewers	2	14.00	15.67	Yes	0.000	0.000
Treatment works compliance	PRI9YKY_32	%	2	97.47	99.04	No	0.000	0.000
Bespoke PCs – Wastewater (Financial)								
Length of river improved	PRI9YKY_4	km	2	459.00	0.00	Yes	0.000	0.000
Operational Carbon	PRI9YKY_6a	%	1	n/a	3.6	Yes	0.283	0.283
Water recycling	PRI9YKY_9	nr	2	0	0	Yes	0.000	0.000
External sewer flooding	PRI9YKY_35	nr	0	7143	5038	Yes	16.985	16.985
Bathing water quality	PRI9YKY_36	nr	0	16	n/a	–	0.000	0.000
Surface water management	PRI9YKY_37	nr	0	0	1	Yes	0.000	0.000
Quality agricultural products	PRI9YKY_40	%	0	n/a	100	Yes	0.000	0.000
Living with Water scheme	PRI9CMA_YKY-01	£m	3	n/a	0.000	–	0.000	0.000

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**Table 3C****Customer measure of experience (C-MeX) table**

Item	Unit	Value
Annual customer satisfaction score for the customer service survey	Number	80.24
Annual customer satisfaction score for the customer experience survey	Number	85.33
Annual C-MeX score	Number	82.78
Annual net promoter score	Number	44.00
Total household complaints	Number	91907
Total connected household properties	Number	2,332,371
Total household complaints per 10,000 connections	Number	394.050
Confirmation of communication channels offered	TRUE or FALSE	TRUE

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 3D****Developer services measure of experience (D-MeX) table**

Item	Unit	Value
Qualitative component annual results	Number	54.74
Quantitative component annual results	Number	69.76
D-MeX score	Number	62.25
Developer services revenue (water)	£m	11.995
Developer services revenue (wastewater)	£m	14.128

**Calculating the D-MeX quantitative component**

Water UK performance metric	Unit	First reporting period (1 April to 30 September)	Second reporting period (1 October to 31 March)	Quantitative score (annual)
W1.1 – Pre-development enquiry – reports issued within target	%	84.62%	85.42%	
W3.1 s45 quotations – within target	%	95.19%	97.55%	
W4.1 s45 service pipe connections – within target	%	68.51%	66.20%	
W6.1 Mains design <500 plots – quotations within target	%	4.32%	19.82%	
W7.1 Mains design >500 plots – quotations within target	%	0.00%	100.00%	
W8.1 Mains construction within target	%	86.41%	76.77%	
W17.1 Mains diversions (without constraints) – quotations within target	%	0.00%	38.46%	
W18.1 Mains diversions – construction/commissioning within target	%		75.00%	
W20.1 Self lay Point of Connection report < 500 plots etc – reports issued within target	%	88.64%	77.36%	
W21.1 Self lay Point of Connection reports >500 plots etc – reports issued within target	%			
W23.1 Self lay design and terms request <500 plots etc – quotations within target	%	11.29%	13.79%	
W24.1 Self lay design and terms request >500 plots etc – quotations within target	%			
W25.1 Self-lay signed agreement – acknowledgements within target	%			
W26.1 Self lay water for pressure/bacteriological testing – provided within target	%	100.00%	100.00%	
W27.1 Self lay permanent water supply – provided within target	%	46.67%	68.97%	
W28.1 Self-lay vesting certificates – issued within target	%			
W29.1 Self-lay Asset Payments – issued within target	%			
W30.1 Self-lay plot references and costing details – issued within target	%	90.10%	93.78%	
S1.1 Pre-development enquiry – reports issued within target	%	99.15%	98.56%	
S3.1 Sewer requisition design – offers issued within target	%	100.00%	100.00%	
S4.1 Sewer requisition – constructed and commissioned within agreed extension	%			
S6.1 Technical vetting of adoptions & diversions – approval or rejection letters within target	%			
S7.1 Adoption legal agreement – draft agreements issued within target	%	100.00%	100.00%	

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

## Table 3D – Continued

### Developer services measure of experience (D-MeX) table

Calculating the D-MeX quantitative component				
Water UK performance metric	Unit	First reporting period (1 April to 30 September)	Second reporting period (1 October to 31 March)	Quantitative score (annual)
S8.1 s106 sewer connection – approval letters issued within target	%			
S9.1 s106 sewer connection – rejection letters issued within target	%			
WN1.1 % of confirmations issued to the applicant within target period	%		50.00%	
WN2.2 % Bulk supply offer letters issued to the applicant within target period	%		25.00%	
WN4.1 % of main laying schemes constructed and commissioned within the target period	%			
WN4.2 % of testing supplies provided within target period	%			
WN4.3 % of permanent supplies made available within the target period	%		100.00%	
SN2.2 % Bulk discharge offer letters issued to the applicant within target period	%		52.94%	
SN4.1 % of main laying schemes constructed and commissioned within the target period	%			
SAM 3/1 Update draft agreement	%		100.00%	
SAM 4/1 Inspections and construction period	%		100.00%	
D-MeX quantitative score (for the relevant reporting period)	%	64.99%	74.53%	
D-MeX quantitative score (annual)	Number			0.70

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**Table 3E****Outcome performance – Non financial performance commitments**

Line description	Unique reference	Unit	Decimal places	Performance level – actual		PCL met?
				Previous reporting year	Current reporting year	
Common						
Risk of severe restrictions in a drought	PR19YKY_38	%	1	0.00	0.0	Yes
Priority services for customers in vulnerable circumstances – PSR reach	PR19YKY_42	%	1	n/a	3.5	No
Priority services for customers in vulnerable circumstances – Attempted contacts	PR19YKY_42	%	1	n/a	46.3	Yes
Priority services for customers in vulnerable circumstances – Actual contacts	PR19YKY_42	%	1	n/a	17.3	No
Risk of sewer flooding in a storm	PR19YKY_34	%	2	19.73	5.60	Yes
Bespoke PCs – Water and Retail (Financial)						
Integrated catchment management	PR19YKY_3	%	1	n/a	0.0	Yes
Biosecurity implementation	PR19YKY_5	nr	0	n/a	0	Yes
Capital carbon and emissions arising from owned land	PR19YKY_6b	%	1	n/a	71.0%	Yes
Creating value from waste	PR19YKY_8	£m	0	n/a	3	Yes
Affordability of bills	PR19YKY_11	%	0	83	82	Yes
Direct support given to customers	PR19YKY_12	nr	0	n/a	61406	Yes
Cost of bad debt	PR19YKY_13	%	2	3.06	3.00	Yes
Priority services awareness	PR19YKY_14	%	0	42	43	No
Priority services satisfaction	PR19YKY_15	%	0	72	91	Yes
Inclusive customer service	PR19YKY_16	%	0	n/a	24	Yes
Renewable energy generation	PR19YKY_41	nr	0	n/a	278	Yes
WINEP Delivery	PR19YKY_NEP01	Text	0	n/a	Met	Yes

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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)
<b>Performance commitments set in standardised units – Water</b>					
Mains repairs – Reactive	Mains repairs per 1000 km	Mains length in km	32,012.00	3,880	121.20
Mains repairs – Proactive	Mains repairs per 1000 km	Mains length in km	32,012.00	3,027	94.56
Mains repairs	Mains repairs per 1000 km	Mains length in km	32,012.00	6,907	215.76
Per capita consumption (PCC)	lpd	Total household population	5,107.05	721	141.16

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
<b>Performance commitments measured against a calculated baseline</b>												
Leakage	MI/d	323.0	324.1	298.7	315.3	289.8					304.2	3.5
Per capita consumption (PCC)	lpd	128.3	128.6	127.7	128.2	141.2					132.5	–3.4

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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		
Water supply interruptions								
Water supply interruptions	Average number of minutes lost per property per year	Number of properties	2,347.57	16996420	51,637	00:07:14		
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	1,646.30	63.66	3.87%					
Line description	Total residential properties	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 %
Priority services for customers in vulnerable circumstances								
Priority services for customers in vulnerable circumstances	2238.18	77,395	3.5%	46,186	21,406	46.3%	7,992	17.3%

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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
<b>Performance commitments set in standardised units</b>						
Internal sewer flooding – customer proactively reported		Number of internal sewer flooding incidents per 10,000 sewer connection	Number of sewer connections	2,328.74	685	2.94
Internal sewer flooding – company reactively identified (i.e. neighbouring properties)		Number of internal sewer flooding incidents per 10,000 sewer connection	Number of sewer connections	2,328.74	93	0.40
Internal sewer flooding		Number of internal sewer flooding incidents per 10,000 sewer connection	Number of sewer connections	2,328.74	778	3.34
Pollution incidents		Pollution incidents per 10,000 km of sewer length	Sewer length in km	52,092.90	125	24.00
Sewer collapses		Number of sewer collapses per 1,000 km of all sewers	Sewer length in km	52,383.00	821	15.67

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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)
<b>Initial calculation of in period revenue adjustment by price control</b>	
Water resources	0.05
Water network+	-7.91
Wastewater network+	8.32
Bioresources (sludge)	0.33
Residential retail	-1.95
Business retail	0.00
Dummy control	0.00
<b>Initial calculation of end of period revenue adjustment by price control</b>	
Water resources	0.03
Water network+	0.00
Wastewater network+	0.01
Bioresources (sludge)	0.00
Residential retail	0.00
Business retail	0.00
Dummy control	0.00
<b>Initial calculation of end of period RCV adjustment by price control</b>	
Water resources	0.00
Water network+	0.00
Wastewater network+	0.00
Bioresources (sludge)	0.00
Residential retail	0.00
Business retail	0.00
Dummy control	0.00

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**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 %"
Unplanned or planned outage			
Planned outage	1,646.30	20.30	1.23%

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	1,451.72	52.53	1,283.29	112.63	5,303,700.00	0.00

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	5,200,806.00	0.00	0.00%	226,402.00	4.35%	4,974,404.00	95.65%	94.40%	0.28%	5.32%

Line description	Number of patch repairs or relining undertaken on sewer and not included in reported sewer collapses.
Sewer collapses	
Sewer collapses	1,317

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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.

[\*\*Table 4A:\*\* Water bulk supply](#)

[\*\*Table 4B:\*\* Analysis of debt](#)

[\*\*Table 4C:\*\* Impact of price control performance to date on RCV](#)

[\*\*Table 4D:\*\* Totex analysis – water resources and water network+](#)

[\*\*Table 4E:\*\* Totex analysis – wastewater network+ and bioresources](#)

[\*\*Table 4F:\*\* Major project expenditure for wholesale water by purpose](#)

[\*\*Table 4G:\*\* Major project expenditure for wholesale wastewater by purpose](#)

[\*\*Table 4H:\*\* Financial metrics](#)

[\*\*Table 4I:\*\* Financial derivatives](#)

[\*\*Table 4J:\*\* Base expenditure analysis – water resources and water network+](#)

[\*\*Table 4K:\*\* Base expenditure analysis – wastewater network+ and bioresources](#)

[\*\*Table 4L:\*\* Enhancement expenditure – water resources and water network+](#)

[\*\*Table 4M:\*\* Enhancement expenditure – wastewater network+ and bioresources](#)

[\*\*Table 4N:\*\* Developer services expenditure – water resources and water network+](#)

[\*\*Table 4O:\*\* Developer services expenditure – wastewater network+ and bioresources](#)

[\*\*Table 4P:\*\* Expenditure on non-price control diversions](#)

[\*\*Table 4Q:\*\* Developer services – New connections, properties and mains](#)

[\*\*Table 4R:\*\* Connected properties, customers and population](#)

**Table 4A****Water bulk supply information for the 12 months ended 31 March 2021**

Line description	Volume	Operating costs	Revenue
Units DPs	MI 3	£m 3	£m 3
<b>Bulk supply exports</b>			
Finningley to Anglian Water	122.138	0.000	0.113
Bradway Grange Farm	0.500	0.000	0.001
IWNL NAV	18.884	0.000	0.023
Bulk supply 4	0.000	0.000	0.000
Bulk supply 5	0.000	0.000	0.000
Bulk supply 6	0.000	0.000	0.000
Bulk supply 7	0.000	0.000	0.000
Bulk supply 8	0.000	0.000	0.000
Bulk supply 9	0.000	0.000	0.000
Bulk supply 10	0.000	0.000	0.000
Total bulk supply exports	141.522	0.000	0.137
<b>Bulk supply imports</b>			
Ladybower import from Severn Trent	20925.330	3.885	
Bulk supply 2	0.000	0.000	
Bulk supply 3	0.000	0.000	
Bulk supply 4	0.000	0.000	
Bulk supply 5	0.000	0.000	
Bulk supply 6	0.000	0.000	
Bulk supply 7	0.000	0.000	
Bulk supply 8	0.000	0.000	
Bulk supply 9	0.000	0.000	
Bulk supply 10	0.000	0.000	
Total bulk supply imports	20925.330	3.885	

**Non-Financial Commentary:**

**4A.1:** We export small volumes of treated water (less than 0.5 MI/d) to Anglian Water at Finningley. Our export volume is estimated based on meter readings obtained from two flow meters. This year's reported volume is as normal. The estimate for this year has been agreed in writing, by emails between Yorkshire Water and Anglian Water colleagues. COVID-19 has not impacted this export and we are not aware of any significant changes to usage in the future.

**4A.2:** We export an extremely low volume of treated water (less than 0.01 MI/d) at Bradway Grange Farm to Severn Trent Water. The export is estimated based on meter readings. This year's reported volume is as normal. The estimate for this year has been agreed in writing, by emails between Yorkshire Water and Severn Trent Water colleagues. COVID-19 has not impacted this export and we are not aware of any significant changes to usage in future.

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**4A.3:** A NAV (new appointment and variation) operates under a Licence granted by Ofwat. NAVs are effectively small water/sewerage companies set up within a water company region. In the last 18 months NAVs have become more active in Yorkshire. During 2020/2021 we have provided a bulk supply of treated water exports to a NAV, IWNL. For the purposes of this line we are reporting this as a single bulk supply. IWNL currently has 12 live sites in our region. Each IWNL site has bulk meters at the boundary, with meter readings taken monthly to estimate supply volumes. COVID-19 has not impacted this export. We anticipate further NAVs coming online during the AMP, with at least two more NAVs currently in the pipeline.

**4A.11:** The total reported is the sum of lines 4A.1-10.

**4A.12:** We import a volume of raw water (approx. 50 MI/d) from Severn Trent Water, from Ladybower Reservoir to Rivelin Lower Reservoir. The data provided for this line is estimated based on daily flow data from Severn Trent's flow meter, and the estimate for this year has been confirmed in writing by letter from Severn Trent. The volume imported this year is in line with normal expectations. The agreed volumes from Severn Trent vary according to defined control lines for stocks in Ladybower Reservoir. 2020/2021 had a dry start with April and May being hot and very dry followed by wetter than average conditions later in the year.

**4A.22:** The total reported is the sum of lines 4A.12-21.

## Operating costs – bulk supply exports

We do not show operating cost information for the three supplies to Anglian, Bradway Grange Farm or the NAVs as all these supplies are from the water distribution network and therefore operating costs and depreciation are not separately identifiable.

**Table 4B****Water bulk supply information for the 12 months ended 31 March 2021**

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' as of 2020/2021 and provides the following information:

- Instrument identifier
- Credit rating
- Currency
- Class/subordination
- Further information
- Instrument start date (if after 31/07/2021)
- Years to maturity
- Principal sum outstanding as at 31 March 2021 (excluding unamortised debt issue costs)
- Amount used to calculate nominal interest cost and cash interest payment (might be equal or differ from principal sum outstanding)
- Years to maturity x principal sum
- Real RPI Coupon
- Real CPI Coupon
- Reference Interest Rate
- Margin over market index
- Nominal Interest Rate
- Nominal Interest Cost (Full year equivalent)
- Cash Interest Payment (Full year equivalent)
- Unamortised debt issue costs as at 31 March 2021
- Value per balance sheet at 31 March 2021
- Fair value of debt at 31 March 2021

The class A and class B ratings displayed in column 'Class/subordination', reflect the debt ratings issued by CRAs on publicly rated debt. 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 2021					Price control period to date				
Line description	Units	DPs	Water resources	Water network+	Waste-water network+	Bio-resources	Additional Control	Water resources	Water network+	Waste-water network+	Bio-resources	Additional Control
Totex (net of business rates, abstraction licence fees and grants and contributions)												
Final determination allowed totex (net of business rates, abstraction licence fees and grants and contributions)	£m	3	35.387	293.884	529.276	62.993	0.000	35.387	293.884	529.276	62.993	0.000
Actual totex (net of business rates, abstraction licence fees and grants and contributions)	£m	3	29.063	327.072	387.528	64.115	0.000	29.063	327.072	387.528	64.115	0.000
Transition expenditure	£m	3	0.405	0.793	5.357	0.083	0.000	0.405	0.793	5.357	0.083	0.000
Disallowable costs	£m	3	0.009	0.495	0.734	0.045	0.000	0.009	0.495	0.734	0.045	0.000
Total actual totex (net of business rates, abstraction licence fees and grants and contributions)	£m	3	29.459	327.370	392.151	64.153	0.000	29.459	327.370	392.151	64.153	0.000
Variance	£m	3	-5.928	33.486	-137.125	1.160	0.000	-5.928	33.486	-137.125	1.160	0.000
Variance due to timing of expenditure	£m	3	-6.846	18.433	-181.663	1.372	0.000	-6.846	18.433	-181.663	1.372	0.000
Variance due to efficiency	£m	3	0.918	15.053	44.538	-0.212	0.000	0.918	15.053	44.538	-0.212	0.000
Customer cost sharing rate	£m	3	0.450	0.450	0.450	0.000	0.000	0.450	0.450	0.450	0.000	0.000
Customer share of totex over/underspend	£m	3	0.413	6.774	20.042	0.000	0.000	0.413	6.774	20.042	0.000	0.000
Company share of totex over/underspend	£m	3	0.505	8.279	24.496	-0.212	0.000	0.505	8.279	24.496	-0.212	0.000
Totex - business rates and abstraction licence fees												
Final determination allowed totex - business rates and abstraction licence fees	£m	3	13.586	32.061	17.243	1.189	0.000	13.586	32.061	17.243	1.189	0.000
Actual totex - business rates and abstraction licence fees	£m	3	13.607	33.600	16.295	1.343	0.000	13.607	33.600	16.295	1.343	0.000
Variance - business rates and abstraction licence fees	£m	3	0.021	1.539	-0.948	0.154	0.000	0.021	1.539	-0.948	0.154	0.000
Customer cost sharing rate - business rates and abstraction licence fees	£m	3	0.586	0.878	0.900	0.900	0.000	0.586	0.878	0.900	0.900	0.000
Customer share of totex over/underspend - business rates and abstraction licence fees	£m	3	0.012	1.352	-0.853	0.139	0.000	0.012	1.352	-0.853	0.139	0.000
Company share of totex over/underspend - business rates and abstraction licence fees	£m	3	0.009	0.187	-0.095	0.015	0.000	0.009	0.187	-0.095	0.015	0.000

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Table 4C – Continued  
Impact of price control performance to date on RCV

			12 months ended 31 March 2021					Price control period to date				
Line description	Units	DPs	Water resources	Water network+	Waste-water network+	Bio-resources	Additional Control	Water resources	Water network+	Waste-water network+	Bio-resources	Additional Control
Totex not subject to cost sharing												
Final determination allowed totex - not subject to cost sharing	£m	3	0.155	3.681	0.912	0.238	0.000	0.155	3.681	0.912	0.238	0.000
Actual totex - not subject to cost sharing	£m	3	0.936	13.036	1.088	0.303	0.000	0.936	13.036	1.088	0.303	0.000
Variance - 100% company allocation	£m	3	0.781	9.355	0.176	0.065	0.000	0.781	9.355	0.176	0.065	0.000
Total company share of totex over/under spend	£m	3	1.295	17.821	24.577	-0.132	0.000	1.295	17.821	24.577	-0.132	0.000
RCV												
Total customer share of totex over/under spend	£m	3	0.425	8.126	19.189	0.139	0.000	0.425	8.126	19.189	0.139	0.000
PAYG rate	£m	3	0.847	0.740	0.441	0.568	0.000	0.847	0.740	0.441	0.568	0.000
RCV element of totex over/underspend	£m	3	0.065	2.115	10.731	0.060	0.000	0.065	2.115	10.731	0.060	0.000
Adjustment for ODI outperformance payment or underperformance payment	£m	3						0.000	0.000	0.000	0.000	0.000
RCV determined at FD at 31 March	£m	3						581.357	2321.650	3813.779	307.518	0.000
Projected 'shadow' RCV	£m	3						581.422	2323.765	3824.510	307.578	0.000

## Totex (net of business rates, abstraction licence fees and grants and contributions) (Lines 1-11)

### Line 4C.1 (Final determination allowed totex)

This was provided by Ofwat in the Financial Flows Data spreadsheet and was inflated to nominal prices from 2017/2018 Average CPIH price base.

### Line 4C.2 (Actual totex)

This has been calculated as per the Ofwat line definition, however when we have reviewed the calculation we have noted a duplication of adjustments between Third party Capex (2B.20) and non-section 185 (4P.3) therefore we have included a zero adjustment for 4P.3.

We have also adjusted this value to exclude our CMA expenditure from this line and we have reported them in line 4C.19.

### Line 4C.3 (Transition expenditure)

We have included the transitional totex that we incurred in 2018/2019 and 2019/2020.

### Line 4C.4 (Disallowable costs)

We can confirm we have excluded the following costs in our totex sharing activities:

- costs associated with impairment of other businesses.
- costs related to financing (bond issuance fees, refinancing, takeover costs).
- fines and investigation costs.
- compensation claims; and
- any other costs where the activity driving it does not, ex ante, have a reasonable expectation of customer benefit.

### Line 4C.5 (Total actual totex)

This is a calculated line (sum of line 4C.2 to 4C.3, minus 4C.4).

### Line 4C.6 (Variance)

This is a calculated line (4C.5 minus 4C.1).

### Line 4C.7 (Variance due to timing of expenditure)

We have included an adjustment to reflect the impact of timing differences.

### Line 4C.8 (Variance due to efficiency)

This is a calculated line (4C.6 minus 4C.7).

### Line 4C.9 (Customer cost sharing rate)

This reflects the sharing rates which were included in the CMA FD19.

### Line 4C.10 (Customer share of totex over/underspend)

This is a calculated line (sum of line 4C.8 multiplied by 4C.9) this is incorrect in the Ofwat guidance as it states 4C.6 not 4C.8.

### Line 4C.11 (Company share of totex over/underspend)

This is a calculated line (4C.6 minus 4C.10).

## Totex – business rates and abstraction licence fees (Lines 12-17)

### Line 4C.12 (Final determination allowed totex – business rates and abstraction licence fees)

This was provided by Ofwat in the Financial Flows Data spreadsheet and was inflated to nominal prices from 2017/2018 Average CPIH price base.

### Line 4C.13 (Actual totex – business rates and abstraction licence fees)

As per the Ofwat guidance is Line 2B.8 (Business rates) plus 2B.3 (Abstraction charges).

### Line 4C.14 (Variance – business rates and abstraction licence fees)

This is a calculated line (4C.13 minus 4C.12).

### Line 4C.15 (Customer cost sharing rate – business rates and abstraction licence fees)

The CMA FD19 redetermination resulted in a different sharing rate for abstraction licence fees (75:25) and business rates (90:10).

This line includes the weighted % for each price control after the different sharing rates were applied.

### Line 4C.16 (Customer share of totex over/underspend – business rates and abstraction licence fees)

This is a calculated line (4C.14 multiplied by 4C.15).

### Line 4C.17 (Customer share of totex over/underspend – business rates and abstraction licence fees)

This is a calculated line (4C.14 minus 4C.16).

## Totex not subject to cost sharing (Lines 18–21)

### Line 4C.18 (Final determination allowed totex – not subject to cost sharing)

This was provided by Ofwat in the Financial Flows Data spreadsheet and was inflated to nominal prices from 2017–18 Average CPIH price base.

### Line 4C.19 (Actual totex – not subject to cost sharing)

We have followed Ofwat guidance and have in addition included the CMA expenditure that we excluded from line 4C.2.

### Line 4C.20 (Actual totex – not subject to cost sharing)

This is a calculated line (4C.19 minus 4C.18).

### Line 4C.21 (Total company share of totex over/under spend)

This is a calculated line (the sum of line 4C.11, 4C.17 and 4C.20).

## RCV (Lines 22–27)

### Line 4C.22 (Total customer share of totex over/under spend)

This is a calculated line (4C.10 plus 4C.16), we have amended the original Ofwat table to reflect that the customer share of the totex over/under spend is used to adjust the RCV. This was previously feeding incorrectly from line 4C.21 'Total company share of totex over/under spend' in Ofwat guidelines.

### Line 4C.23 (PAYG rate)

This was provided by Ofwat in the Financial Flows Data spreadsheet.

### Line 4C.24 (RCV element of totex over/underspend)

This is a calculated line (sum of line 4C.22 multiplied by  $(1 - 4C.23)$ ).

### Line 4C.25 (Adjustment for ODI outperformance payment or underperformance payment)

As per Ofwat guidance this is zero as we do not have any in period ODI adjustments that impact on the RCV.

### Line 4C.26 (RCV determined at FD at 31 March)

This was published by Ofwat within the RCV spreadsheet.

### Line 4C.27 (Projected 'shadow' RCV)

This is a calculated line (sum of line 4C.24 to 4C.26).

**Table 4D****Totex analysis for the 12 months ended 31 March 2021 – water resources**

Line description	Units	DPs	Water resources	network+				Total
				Raw water transport	Raw water storage	Water treatment	Treated water distribution	
Operating expenditure								
Base operating expenditure	£m	3	29.981	11.895	2.358	60.676	154.644	259.554
Enhancement operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Developer services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Total operating expenditure excluding third party services	£m	3	29.981	11.895	2.358	60.676	154.644	259.554
Third party services	£m	3	0.000	0.000	0.000	0.000	1.816	1.816
Total operating expenditure	£m	3	29.981	11.895	2.358	60.676	156.460	261.370
Grants and contributions								
Grants and contributions - operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Capital expenditure								
Base capital expenditure	£m	3	10.322	2.207	0.513	36.829	76.738	126.337
Enhancement capital expenditure	£m	3	3.304	0.175	0.002	4.644	6.52	14.917
Developer services capital expenditure	£m	3	0.000	0.000	0.000	0.000	23.813	23.813
Total gross capital expenditure (excluding third party)	£m	3	13.626	2.382	0.515	41.473	107.071	165.067
Third party services	£m	3	0.000	0.000	0.000	0.000	4.690	4.690
Total gross capital expenditure	£m	3	13.626	2.382	0.515	41.473	111.761	169.757
Grants and contributions								
Grants and contributions - capital expenditure	£m	3	0.000	0.000	0.000	0.000	13.731	13.731
Net totex	£m	3	43.607	14.277	2.873	102.149	254.490	417.396
Cash expenditure								
Pension deficit recovery payments	£m	3	0.262	0.076	0.048	1.254	4.150	5.790
Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Totex including cash items	£m	3	43.869	14.353	2.921	103.403	258.640	423.186
Atypical expenditure								
Floods - Opex (atypical expenditure included in line 4D.1)	£m	3	0.000	0.000	0.000	0.052	0.065	0.117
COVID-19 - Opex (atypical expenditure included in line 4D.1)	£m	3	0.054	0.021	0.010	0.925	5.016	6.026
Other costs - Opex (atypical expenditure included in line 4D.1)	£m	3	0.972	2.387	0.472	3.646	5.686	13.163
COVID-19 -Capex (atypical expenditure included in lines 4D.8, 4D.9 & 4D.10)	£m	3	0.131	0.008	0.017	1.390	1.185	2.731
AMP6 flooding - Capex (atypical expenditure included in line 4D.8)	£m	3	0.130	0.000	0.000	0.000	0.473	0.603
Total atypical expenditure	£m	3	1.287	2.416	0.499	6.013	12.425	22.640

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



## Capital expenditure

Gross regulated capital expenditure associated with the delivery of the wholesale water programme in the current reporting year was £169.8m against a Final Determination of £151.2m. Included within this gross expenditure is a total of £3.3m which we have classified as atypical expenditure associated with additional costs incurred due to COVID-19 (£2.7m) and Flood recovery (£0.6m).

A total of £126.3m 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 against a Final Determination base allowance of £113.5m which also includes the allowance for all developer services capital expenditure identified below.

This is split down further in the above table by Water Resources investment of £10.3m in comparison to the Final Determination in the current report year of £14.4m and Water Networks+ investment of £116.0m in comparison to the Final Determination of £99.1m. This investment has supported the delivery of our service level improvements where we have met six of our 15 Water performance commitments (PCs) but are behind on nine.

The impact of COVID-19, and the subsequently agreed new safe ways of working, have led to us failing to achieve five performance commitments: Education, Gap Sites, Managing Void Properties, Repairing or Replacing Customer Owned Pipes and Per Capita Consumption. We expect that as things start to return to normal in 2021/2022, we should achieve all these performance commitments although Per Capita Consumption remains at risk.

The cold weather we experienced in January and February of 2021 has largely contributed to us failing to achieve our Mains Repairs and Water Supply Interruptions targets, although we are forecasting to achieve these in 2021/2022.

We also failed to achieve our Significant Water Supply Events and Water Quality Compliance (CRI) performance commitments. Whilst we expect to rectify our performance on Significant Water Supply Events in 2021/2022 the stretching target for Water Quality Compliance (CRI) remains a challenge.

For more detailed information on the Water performance commitments please refer to the commentary on Table 3A.

Within the £10.3m Water Resources price control the majority of expenditure (£5.9m) has been on the maintenance and improvement of our impounding reservoir assets to ensure statutory compliance with the Reservoir Act.

A further £1.1m has been invested to support abstraction consent compliance, drinking water quality and water availability with schemes for catchment monitoring at various sites, catchment management at Chellow WTW and the start of an investigation scheme on our groundwater assets.

There have been minor additional costs of £0.1m associated with the impact of new ways of working required to meet the COVID-19 restrictions that has been identified as Atypical expenditure and £0.1m of flood recovery investment that has also been identified as Atypical expenditure.

The remaining investment is the reallocation of the overall Management and General support costs across the total programme which has resulted in £2.6m being allocated to this price control this year.

The majority (£116.0m) of the water base expenditure in the current report year is within the Networks+ price control, which is then split further between Raw Water Transport, Raw Water Storage, Water Treatment and Treated Water Distribution.

Of the £2.2m total allocated to Raw Water Transport, £1.9m has been invested to reduce bursts on our raw water mains at Watersheddles and Longwood, as well as maintaining catchwater, aqueduct and raw water pumping station assets to ensure water availability and to reduce the risk of supply restrictions. The remaining £0.3m of investment is the reallocation of our overall Management and General support costs.

The £0.5m allocated to Raw Water Storage is for the reallocation of the overall Management and General support costs.

One of the large areas of base investment has been on Water Treatment with expenditure totalling £36.8m, of which £15.8m has been invested to maintain and replace our failing treatment assets to ensure they are made available for use and continue to be safe to operate whilst being statutory compliant with EaWR, DSEAR and COSHH and other HSE regulations.

There has been an investment of £13.6m to make improvements at our Water Treatment works (WTWs) to improve drinking water quality with schemes at Chellow, Elvington, Loxley, Ewden and Headingley.

There have been additional costs of £1.4m associated with the impact of new ways of working required to meet the COVID-19 restrictions that have been identified as Atypical expenditure to date.

The remaining £6.7m of investment is the reallocation of the overall Management and General support costs.

The largest area of base investment has been on Treated Water Distribution with expenditure totalling £76.5m, of which £17.1m has been invested to maintain and replace our failing network assets to ensure they are made available for use and continue to be safe to operate whilst being statutory compliant with EaWR, ATEX and other HSE regulations.

Investment that directly supports the delivery of our performance commitment service level targets totals £32.3m in the report year with £11.8m being invested to repair mains bursts due to structural failures, £5.5m on installing or renewing stop taps to allow better management of the water network by reducing customer contacts, £3.5m on improving our service reservoir assets following inspections to identify any repairs required to maintain and improve drinking water quality and £0.3m to address low pressure issues that have been identified and cannot be rectified by network management. To reduce the risk of interruptions to supply and water availability £8.8m has been invested to make the water network more resilient with schemes at water pumping stations at Headingley and Eggborough Road as well as improvements on mains in Richmond and Ness to Terrington, and the rebuilding and upsizing of the Boston Park service reservoir.

There have been some additional costs of £1.2m associated with the impact of new ways of working required to meet the COVID-19 restrictions and £0.5m of flood recovery investment that have been identified as Atypical expenditure to date.

The remaining £25.6m of investment is the reallocation of our overall Management and General support costs.

The water enhancement capital expenditure in the current report year totals £14.9m against a final determination of £37.7m. This is split down further in the above table by Water Resources investment of £3.3m in comparison to the Final Determination in the current report year of £6.2m and Water Networks + investment of £11.6m in comparison to the Final Determination of £31.5m.

There is £3.9m associated with the delivery of our WINEP/NEP environmental regulatory obligations, £0.2m is to address any supply-demand balance issues, £4.4m of metering costs for any new meters installed, and the remaining £6.5m associated with the delivery of other DWI regulatory commitments identified in our final determination.

Within the £3.9m WINEP/NEP investment is £0.4m for the completion of AMP6 NEP programme schemes. All AMP7 Water WINEP and DWI regulatory obligations are forecast to be completed before or in line with their corresponding compliance dates.

Further detailed information on the expenditure in line 4D.9 can be found in the commentary for Table 4L which identifies all enhancement expenditure by purpose.

The water developer services total capital expenditure in the current report year totals £23.8m and is associated with investment on new connections, requisitioned water mains, s185 mains diversions and infrastructure network reinforcement investment to ensure there is no impact on service by growth in the network by new developments. There is income received from developers that offsets most of these costs, which is reported on line 4D.14 of this table, with a more detailed breakdown of this income reported in Table 2E and the corresponding commentary.

Further detailed information on our developer services capital expenditure, in line 4D.10, can be found in Table 4N and corresponding commentary.

Within the report year, third party services expenditure totalling £4.7m 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 Table 4N.7.

Income has been received totalling £13.7m from grants and contributions in the current year associated with the water programme against a Final Determination of £11.2m. 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.

A total of £3.3m Atypical water expenditure has been identified within the current report and reported within the total expenditure reported in the detail above.

A total of £2.7m of these additional costs are associated with COVID-19. These have been apportioned over the water price controls to reflect the same investment reasons and price control splits as the schemes identified that were impacted by programme delays and had additional costs. These costs were due to the new agreed safe ways of working, subsequent compensation events agreed with the partners or for additional IT equipment to support home working following government requirements.

There is also a further £0.6m of costs which was required to repair or replace our water assets, damaged during the extreme flooding events we have experienced at the end of the last AMP period, which has been claimed through our insurance and offset within our operating costs.

## Operating expenditure

Overall, there was an increase in wholesale water costs from 2019/2020.

The year-on-year increase in water resources is primarily due to an increase in insurance premium and general and support (G&S).

A rise in insurance premiums is because of sizeable claims in previous year. Asset related insurance is allocated using Gross Modern Equivalent Asset Value (GMEAV) which is consistent to the industry.

G&S costs have increased in relation to our transformation programme which has identified efficiencies that will allow us to improve our operational performance and meet our stretching FD.

Other than this, there are no significant underlying year-on-year movements in operating expenditure associated with water resources.

Similarly, water network+ has seen an increase in operating costs from 2019/2020 primarily due to:

- COVID-19 has increased household water consumption resulting in an increase of power and chemical usage. Increased operational costs have been incurred such as enhanced cleaning regimes, social distancing requiring additional vehicles, protective equipment to keep our colleagues safe and allow essential working in accordance with government guidance; and 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.
- There have been underlying increases in costs for the water treatment upstream service due to chemical prices being in excess of general inflation. This has been compounded with an increase in chemical consumption due to a surge in demand as a result of COVID-19 and dry weather in the summer.
- Increased electricity prices since 2019/2020 and usage as mentioned above has led to an increase in costs.
- A rise in insurance premiums due to historical claims.
- G&S cost have increased in relation to our transformation programme to improve performance in AMP7 and the CMA referral.
- In 2019/2020, treated water distribution price control saw a slight increase in costs due to a deliberate proactive investment programme to improve leakage performance, including the insourcing of leakage detection resources. The full year impact of insourcing has led to an increase in overhead costs where headcount in 2020/2021 is used as a cost driver.

There has been no operating expenditure in relation to enhanced or developer services for 2020/2021. For further commentary please see 4L and 4N.

## Cash expenditure

In 2019/2020, we presented pension costs in operating expenditure. In 2020/2021, we have presented pension costs in cash expenditure (£5.8m) rather than operating expenditure. In relation to pension costs, RAG 4.09 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 2020/2021 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 difference in 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. The historical pension scheme deficit recovery payments cannot be allocated between the different Kelda group entities and all cash contributions are, therefore, recognised as operating expenditure. The treatment contrasts to most other WASCs who have adopted IFRS and are required to follow defined benefit pension scheme accounting, therefore excluding cash contributions in excess of the IAS 18 defined benefit pension cost from the operating expenditure.

## Atypical expenditure (opex)

Base operating expenditure includes atypical expenditure.

- **Floods:** The exceptional rainfall in November 2019 and February 2020 did not have a significant impact on the water price control, but there were costs of £0.1m from the escalation.
- **COVID-19:** £6.0m relates to costs we have incurred due to increased cleaning regimes, social distancing, protective equipment to keep our colleagues safe and 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.
- **Other:** £13.2m relates to transformation expenditure including reorganisational costs to prepare the business for AMP7, along with costs we incurred during the CMA referral process. The majority of the CMA referral costs have been allocated to water.

## Technical notes

Table 4D in 2019/20 split out operating costs by key subjectives and included unit cost information. For 2020/2021, the table now splits operating cost to base, enhanced, developer services and third party services. In addition, there is a separate section for atypical expenditure which is reported in base operating expenditure.

Table 4E

Totex analysis for the 12 months ended 31 March 2021 – wastewater network+ and bioresources

			network+ Sewage collection			network+ Sewage treatment		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	
Operating expenditure											
Base operating expenditure	£m	3	32.951	30.317	18.943	97.256	-0.075	6.502	17.419	11.221	214.534
Enhancement operating expenditure	£m	3	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.006
Developer services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total operating expenditure excluding third party services	£m	3	32.951	30.317	18.943	97.262	-0.075	6.502	17.419	11.221	214.540
Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total operating expenditure	£m	3	32.951	30.317	18.943	97.262	-0.075	6.502	17.419	11.221	214.540
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
Capital expenditure											
Base capital expenditure	£m	3	52.536	38.533	15.050	85.674	0.306	0.146	28.474	1.667	222.386
Enhancement capital expenditure	£m	3	2.321	2.670	0.889	21.828	0.001	0.001	0.331	0.001	28.042
Developer services capital expenditure	£m	3	6.972	8.184	2.132	0.000	0.000	0.000	0.000	0.000	17.288
Total gross capital expenditure (excluding third party)	£m	3	61.829	49.387	18.071	107.502	0.307	0.147	28.805	1.668	267.716
Third party services	£m	3	0.079	0.087	0.032	0.000	0.000	0.000	0.000	0.000	0.198
Total gross capital expenditure	£m	3	61.908	49.474	18.103	107.502	0.307	0.147	28.805	1.668	267.914
Grants and contributions											
Grants and contributions - capital expenditure	£m	3	4.619	5.132	1.763	0.000	0.000	0.000	0.000	0.000	11.514
Net totex	£m	3	90.240	74.659	35.283	204.764	0.232	6.649	46.224	12.889	470.940
Cash expenditure											
Pension deficit recovery payments	£m	3	1.453	1.185	0.951	2.281	0.041	0.035	0.668	0.069	6.683
Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Totex including cash items	£m	3	91.693	75.844	36.234	207.045	0.273	6.684	46.892	12.958	477.623

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Table 4E – Continued

Totex analysis for the 12 months ended 31 March 2021 – wastewater network+ and bioresources

			network+ Sewage collection			network+ Sewage treatment		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											
Floods – Opex (atypical expenditure included in line 4E.1)	£m	3	0.128	0.142	0.059	1.586	0.000	0.000	1.008	0.105	3.028
COVID 19– Opex (atypical expenditure included in line 4E.1)	£m	3	1.34	1.375	0.68	1.265	0.011	0.021	0.286	0.014	4.992
Other Costs– Opex (atypical expenditure included in line 4E.1)	£m	3	0.809	0.66	0.509	1.828	0.028	0.099	1.358	0.251	5.542
COVID-19 – Capex (atypical expenditure included in lines 4E.8, 4E.9 & 4E.10)	£m	3	0.908	0.732	0.295	3.194	0.000	0.007	1.173	0.013	6.322
AMP6 Flooding – Capex (atypical expenditure included in lines 4E.8)	£m	3	0.970	1.076	0.434	5.160	0.083	0.000	0.306	0.000	8.029
Total atypical expenditure	£m	3	4.155	3.985	1.977	13.033	0.122	0.127	4.131	0.383	27.913

Capital expenditure

Gross regulated capital expenditure associated with the delivery of the wholesale wastewater programme in the current reporting year was £267.9m against a Final Determination of £435.5m. Included within this gross expenditure is a total of £14.4m which we have classified as atypical expenditure associated with additional costs incurred due to COVID-19 (£6.3m) and flood recovery (£8.0m).

A total of £222.4m has been expended within the wastewater base programme to maintain and improve service where required to support the delivery of our wastewater and cross-business Performance Commitments against a Final Determination allowance of £214.9m which also includes the allowance for all developer services capital expenditure identified on the next page.

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This is split down further in the above table by network+ Sewage Collection investment of £106.1m and network+ Sewage Treatment investment of £86.0m, a total of £192.1m in comparison to the Final Determination in the current report year of £187.1m and Bioresources investment of £30.3m in comparison to the Final Determination of £27.8m. This investment has supported the delivery of our service level improvements where we have met eight of our 12 Wastewater performance commitments (Financial) but are behind on two.

Following the CMA decision, we have a new performance commitment, Living with Water scheme, which was only agreed late 2020/2021 and so does not have an outturn for 2020/2021.

Due to the impacts of COVID-19 and the limited bathing water sampling undertaken during the 2020 bathing

water season, Defra have confirmed that bathing waters across England will not be classified for the year 2020. Based on this, there will be no data to report this year and so we are unable to state whether we have achieved or failed the Bathing Water Quality PC.

We failed to achieve our target for Internal Sewer Flooding and, whilst performance this year is better than the previous year, we also failed to achieve the aspirational target for Treatment Works Compliance. This has not attracted a penalty though with our performance being within the deadband for the measure.

For more detailed information on the Wastewater performance commitments please refer to the commentary for Table 3B.



**Below, we have identified further detail on the areas of spend and the improvements this investment will deliver:**

A total of £192.1m has been invested within the wastewater network+ price control against a final determination of £187.1m. This is split between Sewage Collection (£106.1m) and Sewage Treatment (£86.0m).

The majority of the investment within the Sewage Collection programme (£106.1m) area directly supports the delivery of our performance commitment service level targets and totals £73.6m in the report year. Of which £24.2m is being invested to target reductions on internal sewer flooding incidents, £22.9m on reducing external sewer flooding incidents and £25.2m to target and reduce environmental pollution incidents, with the remaining £1.3m to make other reactive unplanned repairs to sewer network assets or create and update drainage area plans to ensure the correct solutions are promoted to resolve service issues.

A total of £15.1m of investment has been made in the current report year to ensure that we continue our programme of work to ensure any private pumping stations adopted in the last asset management period are upgraded to a safe and serviceable standard. As well as investment in other legacy sewer networks assets, to maintain and replace them, ensuring that they are made available for use and continue to be safe to operate whilst being compliant with EaWR & ATEX, DSEAR, LOLER and other statutory HSE regulations.

There have been some additional costs of £1.9m associated with the impact of new ways of working required to meet the COVID-19 restrictions and £2.5m of Flood recovery investment that have been identified as Atypical expenditure to date.

The remaining £17.5m of investment is the reallocation of the overall Management and General support costs.

Of the £86.0m investment within the Sewage treatment programme area a total of £40.7m has been invested to maintain and replace our failing treatment assets to ensure they are made available for use and continue to be safe to operate whilst being statutory compliant with EaWR, DSEAR and COSHH and other HSE regulations.

To ensure compliance and support the delivery of other wastewater service level improvements a total of £29.8m has been spent in the report year. The majority of this expenditure (£20.9m) is associated with ensuring our wastewater treatment work assets are compliant and within all Bathing Water, Flow and Final effluent current consented parameters. A further £8.9m of investment has been made to support the delivery of pollution service level improvements from our sewage treatment asset base.

There have been some additional costs of £3.2m associated with the impact of new ways of working required to meet the COVID-19 restrictions and £5.2m of Flood recovery investment that have been identified as Atypical expenditure in 2020/2021.

The remaining £11.5m of investment is the reallocation of the overall Management and General support costs.

A total of £30.6m has been invested within our Bioresources price control against a final determination of £27.8m. This investment is split across Sludge transport (£0.1m), Sludge treatment (£28.8m) and Sludge disposal (£1.7m).

Investment in the current report year of £9.8m is to complete schemes started in the last AMP as part of our renewable energy sludge strategy to create new facilities at both Leeds (Knostrop) and Huddersfield, to ensure that overall capacity for the treatment of sludge across the Yorkshire Water region can be met (some of our older less efficient and less reliable sludge treatment assets have been closed) as well as £8.7m on continuing our ongoing digester refurbishment programme to keep the need for third party sludge disposal routes as low as possible.

A total of £7.4m has been invested to maintain and replace our failing sludge assets to ensure they are available for use and continue to be safe to operate whilst being statutory compliant with EaWR, DSEAR and COSHH and other HSE regulations.

There have been some additional costs of £1.2m associated with the impact of new ways of working required to meet the COVID-19 restrictions and £0.3m of Flood recovery investment that have been identified as Atypical expenditure in 2020/2021.

The remaining £3.5m of investment is the reallocation of the overall Management and General support costs.



The wastewater enhancement capital expenditure in the current report year totals £28.0m against a final determination of £220.5m. This is split down further in the above table by network+ Sewage Collection investment of £5.9m and Networks+ Sewage Treatment investment of £21.8m, a total of £27.7m (compared to £220.5m in our Final Determination) and Bioresources investment of £0.3m compare to our Final Determination of £0.02m.

There is £22.2m associated with the delivery of our WINEP/NEP environmental regulatory obligations and the remaining £5.8m associated with the delivery of other enhancement commitments identified in our final determination.

Within the £22.2m WINEP/NEP investment is £4.5m for the completion of the AMP6 NEP programme schemes along with 91 outputs being agreed to be delivered later than their original AMP6 compliance dates with the EA. These obligations have all had new compliance dates agreed with the regulator with 61 being completed in the current report year. The remaining 30 outputs are on target to be completed before the new compliance dates agreed. All AMP7 wastewater WINEP regulatory obligations are forecast to be completed before or in line with their corresponding compliance dates.

Further detailed information on the expenditure in lines 4E.9 can be found in the commentary for Table 4M which identifies all enhancement expenditure by purpose.

The wastewater developer services total capital expenditure in the current report year totals £17.3m and is associated with investment on new connections and requisition sewers, s185 sewer diversions and infrastructure network reinforcement investment to ensure there is no impact on service by growth in the sewerage network by new developments. There is income received from developers that offset most of these costs, which is reported on line 4E.14 of this table with a more detailed breakdown of this income reported in Table 2E and corresponding commentary.

Further detailed information on the developer services capital expenditure in line 4E.10 can be found in Table 4O and corresponding commentary.

Within the report year third party services expenditure totalling £0.2m 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 Table 4N.7.

A total of £11.5m of grants and contributions has been received in the current year associated with the wholesale wastewater programme against a Final Determination of £7.9m. 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.

A total of £14.4m Atypical wholesale wastewater expenditure has been identified within the current report.

A total of £6.3m of these additional costs are associated with COVID-19. These have been apportioned over the wastewater price controls to reflect the same investment reasons and price control splits as the schemes identified that were impacted by programme delays and had additional costs. These costs were due to the new agreed safe ways of working, subsequent compensation events agreed with the partners or for additional IT equipment to support home working following government requirements.

There is also a further £8.0m of costs which were required to repair or replace our water assets, damaged during the extreme flooding events we experienced at the end of the last AMP period, which have been claimed through our insurance and offset within our operating costs.

## Operating expenditure

Overall, there was an increase in wholesale wastewater costs from 2019/2020.

Operating costs in sewage collection upstream service have increased due to:

- A rise in electricity costs.
- In 2019/2020, there was 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. This proactive activity also involved insourcing the below ground sewer maintenance team. The full year impact of this change programme can be seen in 2020/2021 with increased staff costs.

- G&S costs have increased predominantly due to the transformation programme across the business which will lead to a step change in operational performance over the AMP. The insourcing mentioned above has increased overhead costs where headcount is used as a cost driver.

Operating costs in sewage treatment upstream service have decreased due to:

- Proactive work at the end of AMP6 to reduce pollution risks and improve compliance in sewage treatment has meant that there has been strong treatment works compliance in 2020/2021 and kept costs related to 'at risk' works to a minimum. Discharge permit compliance in 2020/2021 was 99.1% assisted by the improved trade effluent compliance. There has been no ultraviolet failures and reduced pollution run rate from treatment works. The draft annual Environmental Performance Assessment (EPA) suggest Yorkshire Water are on track for 4-star EPA status.

As with the other price controls, COVID-19 has led to increased operational costs such as enhanced cleaning regimes, social distancing requiring additional vehicles, protective equipment to keep our colleagues safe and allow essential working in accordance with government guidance; and engagement with third party contractors to ensure essential services are delivered whilst our colleagues shield or isolate.

Power costs have increased as a result of higher than average electricity flows due to storms from November 2020 and February 2021 along with increased wholesale energy prices.

G&S costs have increased predominantly due to the transformation programme across the business which will lead to a step change in operational performance over the AMP and the CMA referral.

Despite the increase in costs due to proactive work at the end of AMP6 there has been strong performance in the sewage treatment upstream service.

Year-on-year we have seen an increase in operating costs within the bioresources price control, which is primarily due to outsource of the sludge transport function to a contractor. Due to COVID-19 implications this outsource could not take place at the beginning of the financial year and was postponed to beginning of June 2020. Though there has been an increase in opex costs, from an overall totex perspective bioresources will see a benefit over AMP7 given the ageing asset life of sludge tankers and requirement for significant capital expenditure.

Power costs have increased mainly due to reduced levels of generation. Delays in capital scheme completion for Dewsbury and Huddersfield have impacted the generation performance this financial year. Finally, following on from the Knostrop scheme completion which saw great energy generation performance in 2019/2020, the beginning of the current financial year resulted in some defect resolution on the Combined Heat & Power (CHP) engines which resulted in two months downtime impacting generation at the beginning of the financial year.

As with the wastewater network+ there has been increased COVID-19 and G&S costs.

There has been minimal operating expenditure in relation to enhanced and no operating costs in relation to developer services for 2020/2021. For further information please see 4M and 4O.

## Cash expenditure

In 2019/2020, we presented pension costs in operating expenditure. In 2020/2021, we have presented pension costs in cash expenditure (£6.7m) rather than operating expenditure. In relation to pension costs RAG 4.09 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 2020/2021 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 ensure comparability with the treatment applied by most of the water and sewerage companies who adopt different statutory accounting standards for pensions.

This difference in 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. The historical pension scheme deficit recovery payments cannot be allocated between the different Kelda group entities and all cash contributions are, therefore, recognised as operating expenditure. The treatment contrasts to most other WASCs who have adopted IFRS and are required to follow defined benefit pension scheme accounting, therefore excluding cash contributions in excess of the IAS 18 defined benefit pension cost from the operating expenditure.

## Atypical expenditure (opex)

Base operating expenditure includes atypical expenditure.

- **Floods:** The exceptional rainfall in November 2019 and February 2020 had a significant impact on the wastewater business, resulting in the business being in escalation for several months. This was at a time when the assets had not been fully replaced from the previous major floods in December 2015. Total costs of £3.0m include emergency response and mitigation costs for sites impacted by the flooding incidents.
- **COVID-19:** £5.0m relates to costs we have incurred due to increased cleaning regimes, social distancing, protective equipment to keep our colleagues safe and engagement with third party contractors to ensure essential services are delivered whilst our colleagues shield or isolate.
- **Other:** £5.5m relates to transformation expenditure including reorganisational costs to prepare the business for AMP7, along with costs we incurred during the CMA referral process.

## Technical notes

Table 4D in 2019/2020 split out operating costs by key subjectives and included unit cost information. For 2020/2021, the table now splits operating cost to base, enhanced, developer services and third party services. In addition, there is a separate section for atypical expenditure which is reported in base operating expenditure.

**Table 4F**  
**Major project expenditure for wholesale water by purpose for the 12 months ended 31 March 2021**

			Expenditure in report year £m						Cumulative expenditure on schemes completed in the report year £m					
Line description	Units	DPs	Water resources	Water network+				Total	Water resources	Water network+				Total
				Raw water transport	Raw water storage	Water treatment	Treated water distribution			Raw water transport	Raw water storage	Water treatment	Treated water distribution	
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

**Key**

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Please refer to RAG 4.09 – 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 2021

			Expenditure in report year £m							Cumulative expenditure on schemes completed in the report year £m					
Line description	Units	DPs	Water resources	Water network+				Total	Water resources	Water network+				Total	
				Raw water transport	Raw water storage	Water treatment	Treated water distribution			Raw water transport	Raw water storage	Water treatment	Treated water distribution		
Major project operating expenditure by purpose															
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	0.000
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	0.000
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	0.000
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	0.000

We have nil return on this table for the reporting year following the guidance contained in ‘RAG 4.09 Guideline for the table definitions in the annual performance report’. With regards to section 14 (Major projects) we do not have any major wholesale water projects for the reporting year.

Table 4G

Major project expenditure for wholesale wastewater by purpose for the 12 months ended 31 March 2021

			Expenditure in report year £m								
			Wastewater network+					Bioresources			
			Sewage collection								
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	Total
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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Please refer to RAG 4.09 – 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 2021

			Cumulative expenditure on schemes completed in the report year £m								
			Wastewater network+					Bioresources			
			Sewage collection								
Line description	Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	Total
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



We have nil return on this table for the reporting year following the guidance contained in 'RAG 4.09 Guideline for the table definitions in the annual performance report'. With regards to section 14 (Major projects) we do not have any major wholesale wastewater projects for the reporting year.

## Table 4H

### Financial metrics for the 12 months ended 31 March 2021

Line description	Units	DPs	Current year	AMP to date
<b>Financial indicators</b>				
Net debt	£m	3	5420.479	
Regulatory equity	£m	3	1603.825	
Regulatory gearing	%	2	77.17%	
Post tax return on regulatory equity	%	2	6.78%	
RORE (return on regulatory equity)	%	2	0.14%	0.14
Dividend yield	%	2	2.82%	
Retail profit margin - Household	%	2	-15.82%	
Retail profit margin - Non household	%	2	97.55%	
Credit rating - Fitch	Text	n/a	n/a	
Credit rating - Moody's	Text	n/a	Baa2 (Negative)	
Credit rating - Standard and Poor's	Text	n/a	A- (Negative)	
Return on RCV	%	2	3.47%	
Dividend cover	dec	2	0.28	
Funds from operations (FFO)	£m	3	447.968	
Interest cover (cash)	dec	2	4.06	
Adjusted interest cover (cash)	dec	2	2.24	
FFO/Net debt	dec	2	0.08	
Effective tax rate	%	2	11.45%	
RCF	£m	3	402.788	
RCF/Net debt	dec	2	0.091	
<b>Revenue and earnings</b>				
Revenue (actual)	£m	3	1096.121	
EBITDA (actual)	£m	3	547.776	
<b>Borrowings</b>				
Proportion of borrowings which are fixed rate	%	2	44.19%	
Proportion of borrowings which are floating rate	%	2	22.96%	
Proportion of borrowings which are index linked	%	2	32.85%	
Proportion of borrowings due within 1 year or less	%	2	3.92%	
Proportion of borrowings due in more than 1 year but no more than 2 years	%	2	13.15%	
Proportion of borrowings due in more than 2 years but no more than 5 years	%	2	5.43%	
Proportion of borrowings due in more than 5 years but no more than 20 years	%	2	54.47%	
Proportion of borrowings due in more than 20 years	%	2	23.03%	

#### Key

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**4H.1:** 'Net debt' is a calculated item linking to Table 1E.

**4H.2:** 'Regulatory equity' is a calculated item linking to Table 4C.

**4H.3:** 'Regulatory gearing' is a calculated item linking to Table 4C.

**4H.4:** Following our original APR submission, a formula error was identified for this data item. This has now been resolved which has changed the reported figure to 6.78%. 'Post tax return on regulatory equity has increased from 2.54% when compared to 2019/2020.

**4H.5:** The calculation for 'RORE' has been amended in 2020/2021 APR to linking to Table 1F.17.

1F.17: is not directly comparable to the methodology that was used in AMP6, the main differences are:

- The calculation of 1F.17 does not start at the base return and therefore understates the return on regulated equity.
- The removal of the adjustment for tax impacts.
- Inclusion of adjustment for corporation tax.

For comparison purposes we have included the RORE calculation based on the AMP6 methodology:

	2020/2021 %	2020/2021 £m
Return on regulatory equity	4.35%	114.75
Totex	-1.28%	(33.70)
Retail costs	-0.20%	(5.34)
ODI*	-0.12%	(3.13)
RCV-debt-interest	-1.10%	(28.93)
Other	0.18%	4.76
	<b>1.83%</b>	<b>48.40</b>

\*This includes a draft value for C-MeX and D-MeX which is not included in Table 1F.17.

**4H.6:** 'Dividend yield' is a calculated item linking to Table 1A. Dividend yield of 2.82% (2019/2020: 3.87%) is lower than last year due to a smaller dividend payment made to the parent company. Dividend payments in 2019/2020 included £30.1m to cover Kelda head office costs and Finance interest for 2020/2021 and therefore an equivalent amount is not included in the current year dividends.

**4H.7 & 8:** 'Retail profit margin – Household/Non household' are calculated items linking to both Tables 2A and 2I.

**4H.9-11:** Yorkshire Water Services Limited ("YWS") 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 payment priority 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):

Rating Agency	Class A debt rating	Class B debt rating	Latest publication
Fitch	A- (stable)	BBB- (stable)	June 2021
Moody's	Baa2 (negative)	Ba1 (negative)	March 2020
S&P	A- (stable)	BBB (stable)	April 2021

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:

#### Table 4H Line 13. Dividend cover

The dividend cover ratio is positive due to the profit made in the year. The ratio for this year, 0.28 (2019/2020: -0.19) is higher than 2019/2020 due to lower dividends paid as mentioned in Table 4H Line 6 as well as the fact that a profit was made this year, compared to a loss in 2019/2020. The dividend has been paid to cover costs relating to the entity that have been incurred elsewhere in the group. This was a legal distribution as sufficient distributable reserves were available.

**4H.15:** Interest paid on borrowings is made up of the following:

Rating Agency	£m
YW Net Interest Paid (Table 1D Line 10 of the APR).	£92.228
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 2021).	£45.300
Add loan repayment from YW to fund interest payments on exchange bonds held by subsidiary companies to pay the interest on bonds raised by those subsidiary companies (see notes 8 of the Yorkshire Water Services Ltd Annual Report and Financial Statement for the year ended 31 March 2021 and further detail below).	£6.017
Add back net amount of fees received after costs paid in respect of changes to index swaps during the year (see note 8 of Yorkshire Water Services Ltd Annual Report and Financial Statement for the year ended 31 March 2021)	£2.720
<b>Interest Paid on Borrowings</b>	<b>£146.265</b>

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 (YWFplc) whereby Yorkshire Water pays an amount over to YWF plc for the correct amount of interest to be paid to the bond holders. For the year ended 31 March 2021 this difference amounted to £6m. The associated loans will be repayable in full when the bonds mature.

£2.7m net fees were received after costs paid in respect of changes to index linked swaps during the year.

The purpose of adding the £6.0m and £2.7m 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:

Interest cover (cash) =  $(£448.0m + £146.2m) / £146.2m = 4.06$  times.

**4H.16:** Adjusted interest Cover (cash) = (Funds from operations (Table 4H line 14) plus interest paid on borrowings less RCV run off)/ 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:

Interest Cover (cash) =  $(£448.0m + £146.2m - £266.6m) / £146.2m = 2.24$  times.

**4H.18:** Following our original APR submission, a formula error was identified for this data item. This has now been resolved which has changed the reported figure from 82.36% to 11.45%.

**4H.19:** Data item 19 within Table 4H is a calculated item using ‘Funds from operations’ (4H.14) and ‘Equity dividends paid’ (1D.19). Following our original submission of our APR, a formula error was identified with this data item. This has now been resolved which has resulted in the reported value changing from 493.148 to 402.788.

**4H.20:** Data item 20 within Table 4H is a calculated item using ‘RCF’ (4H.19) and ‘Net debt’ (4H.1).

**4H.23-30:** Yorkshire Water has a balanced mix of funding at fixed, floating and inflation linked interest rates. The proportion of borrowings that are fixed, floating and linked to inflation are broadly comparable to last year's annual performance report. There is a small increase in the proportion of index linked borrowings due to indexation in the year and a small reduction in the proportion of fixed and floating rate borrowings due to annual repayments of amortising borrowings.

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% of the company's refinancing requirements fall due within any 24-month period and that no more than 40% falls due within any AMP.

The proportion of borrowings due within 1 year or less is 3.92% (2019/2020: 0.50%) Yorkshire Water raised £350m of new debt in April 2021 which provides sufficient capital for all the borrowings due for repayment in the year ending March 2022. Other movements to the proportion of borrowings due reflects the reducing maturity of existing debt.

**Table 4I**  
**Financial derivatives**

Line description	Nominal value by maturity (net) at 31 March			Total value at 31 March		Total accretion at 31 March	Interest rate (weighted average for 12 months to 31 March 2021)	
	1 to 2 years	2 to 5 years	Over 5 years	Nominal value (net)	Mark to Market		Payable	Receivable
Units DPs	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	% 3	% 3
<b>Interest rate swap (sterling)</b>								
Floating to fixed rate	0.000	0.000	45.000	45.000	-22.474	0.000	6.033	0.000
Floating from fixed rate	0.000	0.000	430.000	430.000	58.158	0.000	1.423	0.000
Floating to index linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Floating from index linked	0.000	200.352	1088.648	1289.000	-2790.030	186.963	2.906	4.737
Fixed to index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Fixed from index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.000	200.352	1563.648	1764.000	-2754.346	186.963		
<b>Foreign Exchange</b>								
Cross currency swap USD	144.558	113.112	0.000	257.670	49.541	0.000		
Cross currency swap EUR	0.000	0.000	0.000	0.000	0.000	0.000		
Cross currency swap YEN	0.000	0.000	0.000	0.000	0.000	0.000		
Cross currency swap Other	0.000	33.800	0.000	33.800	-4.125	0.000		
Total	144.558	146.912	0.000	291.470	45.416	0.000		
<b>Currency interest rate</b>								
Currency interest rate swaps USD	0.000	0.000	0.000	0.000	0.000	0.000		
Currency interest rate swaps EUR	0.000	0.000	0.000	0.000	0.000	0.000		
Currency interest rate swaps YEN	0.000	0.000	0.000	0.000	0.000	0.000		
Currency interest rate swaps Other	0.000	0.000	0.000	0.000	0.000	0.000		
Total	0.000	0.000	0.000	0.000	0.000	0.000		

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 4I – Continued**  
**Financial derivatives**

Line description	Nominal value by maturity (net) at 31 March			Total value at 31 March		Total accretion at 31 March	Interest rate (weighted average for 12 months to 31 March 2021)	
	1 to 2 years	2 to 5 years	Over 5 years	Nominal value (net)	Mark to Market		Payable	Receivable
Units DPs	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3	% 3	% 3
<b>Forward currency contracts</b>								
Forward currency contracts USD	0.000	0.000	0.000	0.000	0.000	0.000		
Forward currency contracts EUR	0.000	0.000	0.000	0.000	0.000	0.000		
Forward currency contracts YEN	0.000	0.000	0.000	0.000	0.000	0.000		
Forward currency contracts CAD	0.000	0.000	0.000	0.000	0.000	0.000		
Forward currency contracts AUD	0.000	0.000	0.000	0.000	0.000	0.000		
Forward currency contracts HKD	0.000	0.000	0.000	0.000	0.000	0.000		
Forward currency contracts Other	0.000	0.000	0.000	0.000	0.000	0.000		
Total	0.000	0.000	0.000	0.000	0.000	0.000		
<b>Other financial derivatives</b>								
Other financial derivatives	0.000	0.000	0.000	0.000	7.007	0.000		
Total financial derivatives	144.558	347.264	1563.648	2055.470	-2701.923	186.963		

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



**41.1:** In relation to managing interest rate risk Yorkshire Water holds £45.0m (2020: £45.0m) notional value of floating to fixed rate swaps.

**41.2:** Also, in relation to managing interest rate risk, Yorkshire Water holds £430.0m (2020: £430.0m) notional value of floating from fixed rate swaps.

**41.4:** In relation to managing inflation risk, Yorkshire Water holds £1,289.0m (2020: £1,289.0m) notional 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 the London Interbank Offered Rate (LIBOR).
- 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 LIBOR rate mentioned above.

The maturity dates of the company's portfolio of inflation linked swaps range from 2026 to 2063.

On 7 July 2020, Yorkshire Water executed an amendment to the confirmed cash flows of seven inflation linked swaps, with a total notional value of £225.5m. This action helped mitigate, in severe modelled scenarios, a breach in interest coverage covenants. The amendment resulted in a re-phasing of interest due to the company on the receipt legs of the swaps in future years out to 2027/2028, such that net interest cash payments reduced by £10.6m in the year ending 31 March 2021.

On 24 August 2020, Yorkshire Water successfully extended the Mandatory Early Termination Dates ("Mandatory Breaks"), which reduce associated credit charges from bank counterparties, on £79.1m notional of inflation linked swaps. The Mandatory Breaks were extended from February 2023 to February 2028 with an upward, permanent adjustment to the real coupon and a voluntary payment of accretion on two of the swaps. These changes increase interest costs by £1.0m per annum (to be adjusted further for future inflation) from 2023 onwards on the pay leg of the swaps, and increase interest cash receipts on the receive legs by £0.7m per annum from February 2021 to February 2028. The maturity dates, and all other material terms, of these swaps remain unchanged.

On 4 March 2021, Yorkshire Water successfully completed the extension of Mandatory Breaks on £72.4m notional of seven inflation linked swaps. These swaps have been amended such that their Mandatory Breaks were extended individually from February 2023 to February 2028 or February 2033. There is an upward, permanent adjustment to the real coupons that in total will increase annual interest payments by £0.9m (to be adjusted further for future inflation) from 2023 onwards. All other material terms of these swaps remain unchanged.

At 31 March 2021, swaps with a total notional 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).

**41.8:** 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.

**41.11:** 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.

**41.26:** Other financial derivatives relate to Yorkshire Water's exposure to energy prices 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 41.26.

All other data items within Table 41 are a zero input.

**Table 4J****Base expenditure analysis for the 12 months ended 31 March 2021 – 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
Operating expenditure								
Power	£m	3	2.544	4.940	-0.152	11.818	12.716	31.866
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Bulk supply	£m	3	3.885	0.000	0.000	0.000	0.000	3.885
Renewals expensed in year (infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (non-infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other operating expenditure	£m	3	9.945	4.941	1.811	47.624	108.076	172.397
Local authority and Cumulo rates	£m	3	8.047	2.014	0.699	0.987	29.653	41.400
Service Charges								
Canal & River Trust abstraction charges/ discharge consents	£m	3	5.560	0.000	0.000	0.000	0.000	5.560
Environment Agency/ NRW abstraction charges/ discharge consents	£m	3	0.000	0.000	0.000	0.247	0.000	0.247
Other abstraction charges/ discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other operating expenditure								
Costs associated with Traffic Management Act	£m	3	0.000	0.000	0.000	0.000	4.199	4.199
Costs associated with lane rental schemes	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Statutory water softening	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Total base operating expenditure	£m	3	29.981	11.895	2.358	60.676	154.644	259.554
Capital expenditure								
Maintaining the long term capability of the assets - infra	£m	3	6.084	1.627	0.000	0.040	37.642	45.393
Maintaining the long term capability of the assets - non-infra	£m	3	4.238	0.580	0.513	36.789	39.096	80.944
Total base capital expenditure	£m	3	10.322	2.207	0.513	36.829	76.466	126.337
Traffic Management Act								
Projects incurring costs associated with Traffic Management Act	nr	0	0	0	0	0	27208	27208

**Key**

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

## Base capital expenditure

A total of £126.4m 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 £45.4m and non-infra £80.9m.

Further detail on the areas of spend and the improvements our overall water base investment will deliver can be found in the commentary for Table 4D.

The total of £45.4m water infra base investment is split between the Water Resources price control (£6.1m) and the Water network+ price control (£39.3m).

In summary, the majority of the investment within the Water Networks+ price control totalling £39.3m supports the delivery of our water service level improvements, as well as investment to maintain and replace our failing raw water and distribution network assets, to ensure they are available for use and continue to be safe to operate whilst being statutory compliant with HSE regulations. The remaining £6.1m of water base infrastructure investment is on the maintenance and refurbishment of our impounding reservoir assets.

The total £80.9m of water non-infra base investment is split between the Water Resources price control (£4.2m) and the Water network+ price control (£76.7m).

In summary, the investment within the Water Networks+ price control totalling £76.7m is split between £43.7m of investment that is directly allocated to support the delivery of our water service level improvements, maintain and replace our failing raw water and distribution network assets, and ensure statutory compliance with HSE regulations, with the remaining £33.0m associated with a reallocation of Management and General costs apportioned across the whole programme.

Investment of £4.2m within the Water Resources price control is split between £1.6m of investment that is directly allocated to support the delivery of our water service level improvements, maintain and replace our failing water resource assets and ensure statutory compliance with HSE regulations, with the remaining £2.6m associated with its reallocation of Management and General costs apportioned across the whole programme.

## Base operating expenditure

Table 4J splits out the base expenditure in Table 4D. For more information on year on year variances refer to the commentary for 4D.

Costs associated with the Traffic Management Act has increased by £0.7m from 2019/2020. This is the full year effect of local authorities implementing permits, offset by a reduction in job numbers.

## Technical notes

Table 4J in 2019/2020 presented gross operating expenditure which excluded atypical expenditure associated with wholesale water activities. For 2020/2021 atypical expenditure is included in table 4J as per RAG4.09. Information on atypical expenditure included in 4J can be found in Table 4D.

**Table 4K****Base expenditure analysis for the 12 months ended 31 March 2021 – wastewater network+ and bioresources**

Line description	Units	DPs	Foul	Expenditure in report year			
				Wastewater network+			
				Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment
<b>Operating expenditure</b>							
Power	£m	3	2.889	2.034	0.852	29.990	0.202
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000
Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (non-infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000
Other operating expenditure	£m	3	28.919	27.047	17.259	47.554	-0.280
Local authority and Cumulo rates	£m	3	0.095	0.077	0.061	16.059	0.003
<b>Service Charges</b>							
Canal & River Trust discharge consents	£m	3	0.000	0.000	0.293	0.000	0.000
Environment Agency/NRW discharge consents	£m	3	0.932	1.031	0.424	3.653	0.000
Other discharge charges/permits	£m	3	0.000	0.000	0.000	0.000	0.000
<b>Other expenditure</b>							
Costs associated with Traffic Management Act	£m	3	0.116	0.128	0.054	0.000	0.000
Costs associated with lane rental schemes	£m	3	0.000	0.000	0.000	0.000	0.000
Costs associated with Industrial Emissions Directive	£m	3	0.000	0.000	0.000	0.000	0.000
Total base operating expenditure	£m	3	32.951	30.317	18.943	97.256	-0.075
<b>Capital expenditure</b>							
Maintaining the long term capability of the assets – infra	£m	3	40.060	24.997	9.592	13.952	0.000
Maintaining the long term capability of the assets – non-infra	£m	3	12.476	13.536	5.458	71.722	0.306
Total base capital expenditure	£m	3	52.536	38.533	15.050	85.674	0.306
<b>Traffic Management Act</b>							
Projects incurring costs associated with Traffic Management Act	nr	0	585	645	270	0	0

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 4K – Continued****Base expenditure analysis for the 12 months ended 31 March 2021 – wastewater network+ and bioresources**

			Expenditure in report year			
			Bioresources			
Line description	Units	DPs	Sludge Transport	Sludge Treatment	Sludge Disposal	Total
Operating expenditure						
Power	£m	3	0.001	-2.201	0.002	33.769
Income treated as negative expenditure	£m	3	0.000	-2.293	0.000	-2.293
Bulk discharge	£m	3	0.000	0.000	0.000	0.000
Renewals expensed in year (infrastructure)	£m	3	0.000	0.000	0.000	0.000
Renewals expensed in year (non-infrastructure)	£m	3	0.000	0.000	0.000	0.000
Other operating expenditure	£m	3	6.499	20.576	11.215	158.789
Local authority and Cumulo rates	£m	3	0.002	1.337	0.004	17.638
Service Charges						
Canal & River Trust discharge consents	£m	3	0.000	0.000	0.000	0.293
Environment Agency/NRW discharge consents	£m	3	0.000	0.000	0.000	6.040
Other discharge charges/permits	£m	3	0.000	0.000	0.000	0.000
Other expenditure						
Costs associated with Traffic Management Act	£m	3	0.000	0.000	0.000	0.298
Costs associated with lane rental schemes	£m	3	0.000	0.000	0.000	0.000
Costs associated with Industrial Emissions Directive	£m	3	0.000	0.000	0.000	0.000
Total base operating expenditure	£m	3	6.502	17.419	11.221	214.534
Capital expenditure						
Maintaining the long term capability of the assets - infra	£m	3	0.000	0.000	0.000	88.601
Maintaining the long term capability of the assets - non-infra	£m	3	0.146	28.474	1.667	133.785
Total base capital expenditure	£m	3	0.146	28.474	1.667	222.386
Traffic Management Act						
Projects incurring costs associated with Traffic Management Act	nr	0	0	0	0	1500

**Key**

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

## Base capital expenditure

A total of £222.4m 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 £88.6m and non-infra £133.8m.

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 £88.6m wastewater infra base investment is split between the network+ Sewage Collection (£74.6m) and network+ Sewage Treatment (£14.0m).

All of the network+ Sewage Collection and network+ Sewage Treatment investment is directly allocated to support the delivery of our wastewater service level improvements, to maintain and replace our failing wastewater sewerage assets and ensure statutory compliance with HSE regulations.

The total £133.8m of wastewater non-infra base investment is split between the network+ Sewage collection (£31.5m), network+ Sewage treatment (£72.0m) and the Bioresources price control (£30.3m).

Investment of £31.5m within the network+ Sewage Collection price control is split between £14.0m of investment that is directly allocated to support the delivery of our water service level improvements, maintain and replace our failing water resource assets, and ensure statutory compliance with HSE regulations, with the remaining £17.5m associated with its reallocation of Management and General costs apportioned across the whole programme.

Investment of £72.0m within the network+ Sewage Treatment price control is split between £60.5m of investment that is directly allocated to support the delivery of our water service level improvements, maintain and replace our failing water resource assets and ensure statutory compliance with HSE regulations, with the remaining £11.5m associated with its reallocation of Management and General costs apportioned across the whole programme.

Investment of £30.3m within the Bioresources price control is split between £26.8m of investment that is directly allocated to support the delivery of our water service level improvements, maintain and replace our failing water resource assets and ensure statutory compliance with HSE regulations, with the remaining £3.5m associated with its reallocation of Management and General costs apportioned across the whole programme.

## Base operating expenditure

Table 4K splits out the base expenditure in 4E. For more information on year on year variances refer to the commentary for 4E.

Costs associated with Traffic Management Act are in line with previous years.

## Technical notes

Table 4K in 2019/2020 presented gross operating expenditure which excluded atypical expenditure associated with wholesale wastewater activities. For 2020/2021 atypical expenditure is included in Table 4J as per RAG4.09. Information on atypical expenditure included in 4K can be found in Table 4E.

## Table 4L

### Enhancement expenditure for the 12 months ended 31st March 2021 – water resources and water network+

Due to the size of the data table, we have published Table 4L separately on our website here:

## Narrative on Costs

The total gross regulated capital expenditure associated with the delivery of the wholesale water resources and water network+ programme of enhancement expenditure in the current reporting year was £14.9m against a Final Determination of £37.7m. Included within this gross expenditure is a total of £0.05m which we have classified as Atypical expenditure associated with additional costs incurred due to COVID-19. These costs have been apportioned over the price controls to reflect the same investment reasons and price control splits as the schemes identified as impacted with programme delays and having additional costs. These costs were due to the new agreed safe ways of working which have had subsequent compensation events agreed with our partners.

Of the total gross regulated capital expenditure (£14.9m) invested within the year, approximately 90% of outputs (£13.4m) are associated with AMP7 obligations. The remaining 10% (£1.5m) is associated with schemes related to AMP6. These are discussed further below on specific reporting lines.

## 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.

## Capital expenditure incurred within the reporting year

Below, we have summarised the areas of expenditure on any line with more than £0.50m of expenditure, in either the current report year, or cumulative totals. Due to some of the values being reported being less than £1.0m we have expanded these figures to report to two decimal places.

### (4L.1) Ecological improvements at abstractions:

During the year we have invested £0.87m across numerous schemes in the Yorkshire region. This has included investing £0.35m on two schemes in relation to agreed outputs relating to s41 of the Habitats Directive. A further £0.92m invested at South Pennine Moors SAC, South Pennine Moors Phase 1 SPA and South Pennine Moors Phase 2 SPA in relation to our SSSI statutory obligations. At West Beck (East Yorkshire) we have spent £0.82m as part of an EA investigation into the increased use of the intake to address deteriorating water quality. Finally, £0.77m has been invested as part of an adaptive flow management scheme aiming to measure the effectiveness of some of our mitigation measures implemented in AMP5 or AMP6. Work is ongoing at Thruscross, Hebden and Swinsty reservoirs.

### (4L.4) Eels Regulations (measures at intakes):

We have invested £1.31m within the year across a variety of schemes. Expenditure is primarily supporting EA agreed AMP7 obligations and totals £0.88m invested on works commencing to enable fish passage at weirs including Aire Banks Mill, Worth Weir, Cheesebottom Weir, Cononley Weir and Watson Mill.

The remaining investment within the year (£0.43m) relates to AMP6 fish pass obligations. This is expenditure following the agreed regulatory date being achieved. At Eastwood fish pass a further £0.31m has been spent this year and at Tophill Low a further £0.10m.



**(4L.10) Drinking Water Protected Areas**

**(schemes):** We have invested £1.14m within the year of which £1.06m relates to water resources. At Thornton Steward we have spent £0.34m restoring upland catchment to reduce the impact of land use on raw water quality. We have also invested £0.21m as part of our Beyond Nature programme developing site specific farm management plans with agricultural tenants. Also, £0.05m has been spent in Chalk Wolds (West Yorkshire) as part of a scheme to produce a water balance.

**(4L.39) New meters requested by existing customers (optants):**

This relates to investment to ensure that any customer that requests to change to a measured supply through our domestic meter optant programme have a meter fitted at no cost to them. In the current year £4.09m has delivered 17,804 meters fitted for our customers.

**(4L.49) Improvements to taste, odour and colour:**

Within the year, £2.99m has been invested improving consumer acceptability of drinking water relating to colour, taste and odour. Most of this investment has taken place at Sladen WTW (£0.91m), Chellow Heights WTW (£0.39m), Fixby WTW (£0.37m), Oldfield WTW (£0.25m) and Langsett WTW (£0.72m) which is an ongoing AMP6 scheme.

**(4L.52) Meeting lead standards:** We have spent £2.33m in the year meeting lead standards. This includes £0.84m on our 'free and matching' programme. Yorkshire Water will replace any lead pipes on our part of the supply from the water main to the stop tap at the boundary of a customer's property free of charge, if they are prepared to replace the lead supply pipe which runs from the boundary of their property to the point of entry into the building.

We invested a further £0.45m in Leeds (Pontefract Lane - LS9), £0.46m in Hull (Telford - HU9) and £0.19m at properties addressing lead exceedance to comply with DWI requirements.

**(4L.70) Atypical Expenditure – COVID-19:**

Expenditure relates to a total of £0.05m of additional costs are associated with COVID-19. These have been apportioned over the price controls to reflect the same investment reasons and price control splits as the schemes identified were impacted by programme delays and had additional costs. These costs were due to the new agreed safe ways of working which have had subsequent compensation events agreed with the partners.

**Operating expenditure incurred within the reporting year**

This is a new table for 2020/2021. We have reported £nil opex cost for enhancement expenditure as enhanced capital expenditure has just started. We expect these costs to increase through AMP 7.

## Table 4M

### Enhancement expenditure for the 12 months ended 31st March 2021 – wastewater network+ and bioresources

Due to the size of the data table, we have published Table 4M separately on our website here:

The total gross regulated capital expenditure associated with the delivery of the wholesale wastewater network+ and bioresources programme of enhancement expenditure in the current reporting year was £28.0m against a Final Determination of £220.5m. Included within this gross expenditure is a total of £1.10m which we have classified as Atypical expenditure associated with additional costs incurred due to COVID-19. These have been apportioned over the price controls to reflect the same investment reasons and price control splits as the schemes identified as impacted with programme delays and having additional costs. These costs were due to the new agreed safe ways of working which have had subsequent compensation events agreed with the partners.

Of the total gross regulated capital expenditure (£28.0m) invested within the year approximately 74% (£20.7m) is associated with AMP7 obligations. The remaining expenditure, approximately 26% (£7.3m) is associated with schemes related to AMP6 outputs. These are discussed further below on specific reporting lines.

### Regulatory obligations delivered within the reporting year

**Event duration monitoring at intermittent discharges:** As part of our AMP6 obligations there remained a total 89 sites that were still outstanding as we entered AMP7. These were due to a combination of factors. For some, the activity had been completed however we were awaiting agreed sign-off. Others were delayed due to COVID-19 and the remaining were missed due to a combination of flood damage after the most recent flooding and H&S restrictions. A further 60 of the outstanding (89) obligations have been delivered within the year. The remaining 29 will be delivered by September 2021 as agreed with the EA.

**Phosphorus removal:** In last year's APR we informed you that all AMP6 phosphorus schemes had been completed except for Leeming Bar. Following further work throughout the year this has now received sign-off from the EA.

All AMP7 Wastewater WINEP and DWI regulatory obligations are forecast to be completed before or in line with their corresponding compliance dates.

### Capital expenditure incurred within the reporting year

Below, we have summarised the areas of expenditure on any line with more than £0.50m of expenditure in either the current report year or cumulative totals. Due to some of the values being reported being less than £1.0m we have expanded these figures to report to two decimal places

**(4M.4) Event Duration Monitoring at intermittent discharges:** Expenditure within the year (£1.04m) relates primarily to two schemes. We invested £0.67m to continue to deliver our remaining AMP6 obligations. A further 60 of the outstanding 89 obligations (referenced above) have been delivered within the year. The remaining 29 will be delivered by September 2021 as agreed with the EA.

We also spent £0.35m commencing the installation at 90 assets of event and duration monitoring at the point the process discharges to storm retention or the environment. These are due to be completed in 2021/2022 in line with the agreed compliance date.

**(4M.13) Schemes to increase storm tank capacity:** Within the year, £0.52m has been invested delivering our U\_IMP6 obligations to increase storm tank capacity at various locations. The key driver this year is at Sutton on the Forest (£0.35m) for delivery by 31st March 2025.

**(4M.28) Phosphorus removal:** We have invested £15.60m within the year to meet new or tightened consent conditions for phosphorus at numerous locations. Of this £2.67m relates to expenditure incurred this year relating to regulatory obligations delivered in AMP6. This includes a further £0.49m invested delivering our outstanding AMP6 obligation at Leeming Bar, which has now received EA sign-off as complete. This is also included within the cumulative expenditure table (£2.62m).

The remaining investment within the year (£12.93m) relates to AMP7 obligations at numerous locations. The key drivers this year are at Sutton on the Forest (£1.70m), Stillington STW (£1.10m), Sheriff Hutton STW (£1.71m) and Oxenhope STW (£1.85m).

**(4M.31) Reduction of sanitary parameters:**

Investment within the year was £1.99m of which £1.29m relates to additional expenditure incurred on AMP6 regulatory obligations.

The remaining £0.70m relates to AMP7 obligations to meet new or tightened consent conditions for one or more of the sanitary parameters. Investment is at numerous STW locations including Easingwold, Skipton, Earby, Bellerby and Barwick in Elmet.

**(4M.37) Investigations:** Investment within the of year of £2.48m relates primarily to a single scheme with multiple investigations linked to regulatory obligations identified in the Water Industry National Environment Programme (WINEP). These are linked to the WFD\_INV driver to understand the impacts of wastewater discharges on receiving river water quality against the appropriate WFD Good standards. This will help to identify potential investment for AMP8 to improve water quality against WFD standards.

**(4M.41) Growth at sewage treatment works (excluding sludge treatment):** Our expenditure of £1.32m within the year has been to meet increased demand at sewage treatment works at two locations. In Withernsea (£.093m) we are currently relocating the existing works due to coastal erosion. In Beverley, we have invested a further £0.39m as part of a scheme which commenced in AMP6. This project has now concluded, and the cumulative expenditure related to delivering this output (£2.74m) is included in the table.

**(4M.44) Reduce flooding risk for properties:**

This relates to expenditure (£1.88m) within the year to enhance the public sewerage system to reduce the risk to properties and external areas of flooding from sewers.

Of the total invested, £0.88m relates to expenditure incurred closing out schemes started in AMP6. The remaining £1.00m relates to numerous low value AMP7 schemes including our block Sewer Flood Management scheme which invested £0.21m. This scheme also concluded in the year and this value is contributing to the £0.74m in the cumulative expenditure table.

The remaining scheme which also concluded in the year was at Bell Lane in Pontefract where we have altered the connection to the property and installed a Positive Surcharge Protection chamber to provide 1 in 30-year protection against flooding. Expenditure within the year was £0.15m and cumulative expenditure was £0.53m.

**(4M.70) Atypical Expenditure – COVID-19:**

This expenditure relates to a total of £1.10m of additional costs associated with COVID-19. These have been apportioned over the price controls to reflect the same investment reasons and price control splits as the schemes identified were impacted by programme delays and had additional costs. These costs were due to the new agreed safe ways of working which have had subsequent compensation events agreed with our partners.

## Operating expenditure incurred within the reporting year

This is a new table for 2020/2021. We have reported minimal opex cost for enhancement expenditure as enhanced capital expenditure has just started. We expect these costs to increase through AMP 7.

**Table 4N**

**Developer services expenditure for the 12 months ended 31st March 2021 – water resources and water network+**

				Expenditure in report year					
				Water network+					
Line description		Units	DPs	Water resources	Raw water distribution	Raw water storage	Water treatment	Treated water distribution	Total
New connections	Capex	£m	3	0.000	0.000	0.000	0.000	9.243	9.243
New connections	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Requisition mains	Capex	£m	3	0.000	0.000	0.000	0.000	10.346	10.346
Requisition mains	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Infrastructure network reinforcement	Capex	£m	3	0.000	0.000	0.000	0.000	4.150	4.150
Infrastructure network reinforcement	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
s185 diversions	Capex	£m	3	0.000	0.000	0.000	0.000	0.074	0.074
s185 diversions	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other price controlled activities	Capex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other price controlled activities	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Total developer services expenditure – capex	Capex	£m	3	0.000	0.000	0.000	0.000	23.813	23.813
Total developer services expenditure – opex	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Total developer services expenditure	Totex	£m	3	0.000	0.000	0.000	0.000	23.813	23.813

Developer services expenditure associated with the wholesale water programme in the current report year total £23.8m which is all reported in the above table under the Water network+ Treated water distribution price control.

Further detail of the expenditure by line description is identified below along with detail of the corresponding income received to identify the net impact on the overall programme as well as a comparison to Final Determination allowances for the current year:

A total of £9.3m in the current report year is associated with S45 new connections for which we have received £5.8m of income from developers, which is higher than the allowance within the Final Determination (FD) of £6.3m.

A total of £10.3m in the current report year is associated with requisitioned water mains for which we have received £4.6m of income from developers. This level of expenditure is higher than the allowance within the FD of £1.0m due to an increase in the number of requests in comparison to that forecast in our FD.

**Key**

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We have invested £4.2m in 2020/2021 to reinforce our Water Network assets including £1.2m of infrastructure charge income from developers. This level of expenditure is above the allowance made in the final determination in the current report year by £1.2m, the level of investment and its impact on the charge going forward are reported in the commentary for Table 2K.

The remaining expenditure relates to the completion of a s185 diversion requests received for diverting water mains situated in private land which had associated gross expenditure of £0.1m in the current report year of which £0.1m of income has been received from developer services customers. The level of development activity in 2020/2021 due to the pandemic, has meant very few diversion enquiries have been received resulting in no new requests being started in the current year.

## **Operating expenditure**

The majority of our developer services costs are of a capital nature and minimise the requirements for opex costs.

Table 40

Developer services expenditure for the 12 months ended 31st March 2021 – wastewater network+ and bioresources

Expenditure in report year												
				Wastewater network+					Bioresources			Total
Line description		Units	DPs	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge Transport	Sludge Treatment	Sludge Disposal	
New connections and requisition sewers	Capex	£m	3	1.990	1.553	0.276	0.000	0.000	0.000	0.000	0.000	3.819
New connections and requisition sewers	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Infrastructure network reinforcement	Capex	£m	3	0.810	0.758	0.306	0.000	0.000	0.000	0.000	0.000	1.874
Infrastructure network reinforcement	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
s185 diversions	Capex	£m	3	4.172	5.873	1.550	0.000	0.000	0.000	0.000	0.000	11.595
s185 diversions	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other price controlled activities	Capex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other price controlled activities	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total developer services expenditure	Capex	£m	3	6.972	8.184	2.132	0.000	0.000	0.000	0.000	0.000	17.288
Total developer services expenditure	Opex	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total developer services expenditure	Totex	£m	3	6.972	8.184	2.132	0.000	0.000	0.000	0.000	0.000	17.288

Developer services expenditure associated with the wholesale water programme in the current report year total £17.3m which is all reported in the above table under the Wastewater network+ price control.

Further detail of the expenditure by line description is identified on this page along with detail of the corresponding income received to identify the net impact on the overall programme as well as a comparison to Final Determination allowances for the current year.

A total of £3.8m in the current report year is associated with requisitioned sewers for which we have received £1.1m of income from developers.

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This level of expenditure is higher than the allowance made within the Final Determination (FD) of £1.0m due to an increase in the number of requests in comparison to that forecast in the FD.

Investment to reinforce our Wastewater Network assets totalling £1.9m in year for which our Infrastructure charge has received income of £1.9m from developers. This level of expenditure is much lower than the allowance made in the final determination in the current report year of £5.1m, the level of investment and its impact on the charge going forward are reported in the commentary for Table 2K.

The remaining expenditure relates to s185 diversion requests received for diverting sewers situated in private

land which had associated gross expenditure of £11.6m in the current report year of which £8.7m of income has been received. This level of expenditure is higher than the allowance made within the FD of £2.7m due to an increase in the number of requests in comparison to that forecast in the Final Determination which is in complete contrast to water diversions.

Operating expenditure

The majority of our developer services costs are of a capital nature and minimise the requirements for opex costs. Yorkshire Water do not undertake the laying and construction of sewer connections, as we do not exercise our powers under S107, therefore line 40.2 is a nil return.

**Table 4P****Expenditure on non-price control diversions for the 12 months ended 31 March 2021**

Line description	Units	DPs	Water resources	Water network+	Wastewater network+	Bioresources	Total
<b>Non-price control diversions</b>							
Diversions – NRSWA	£m	3	0.000	4.681	0.198	0.000	4.879
Diversions – other non-price control	£m	3	0.000	0.009	0.000	0.000	0.009
Total expenditure on non-price control diversions	£m	3	0.000	4.690	0.198	0.000	4.888

Expenditure on non-price control diversions with the wholesale programme in the current report year totals £4.9m, of which £4.7m is within the Water network+ price control and £0.2m 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 Final Determination (FD) but income totalling £2.0m (split between Water £2.2m and Wastewater –£0.3m) has been received and reported within Table 2E.

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## Table 4Q

### Developer services – New connections, properties and mains

Line description	Units	DPs	Water	Wastewater	Total
<b>Connections volume data</b>					
New connections (residential – excluding NAVs)	nr	0	9358	1380	10738
New connections (business – excluding NAVs)	nr	0	266	217	483
Total new connections served by incumbent	nr	0	9624	1597	11221
New connections – SLPs	nr	0	2845		
<b>Properties volume data</b>					
New properties (residential – excluding NAVs)	nr	0	9783	10556	20339
New properties (business – excluding NAVs)	nr	0	554	384	938
Total new properties served by incumbent	nr	0	10337	10940	21277
New residential properties served by NAVs	nr	0	324	0	324
New business properties served by NAVs	nr	0	0	0	0
Total new properties served by NAVs	nr	0	324	0	324
Total new properties	nr	0	10661	10940	21601
New properties – SLP connections	nr	0	2845		
<b>New water mains data</b>					
Length of new mains (km) – requisitions	nr	0	42		
Length of new mains (km) – SLPs	nr	0	32		

**4Q.1–5 & 7–12:** There has been a reduction in the overall number of new connections and properties connected to our network in 2020/2021 compared to 2019/2020. The main factor in this reduction has been the impact of COVID-19 on the building and construction industry throughout the national lockdown months. A lower number of new connections were made as a result of building sites being closed and contractors not being able to continue with excavations.

**4Q.6:** New non-household connected properties for water have significantly reduced in 2020/2021 compared to 2019/2020 with wastewater connections reducing when comparing the same periods. This is due to the impact COVID-19 had on our Developer Services during the lockdown months as described in 4Q.1–5 & 7–11.

**4Q.13 & 14:** The reported figure for 2020/2021 is a 31% reduction compared to 2019/2020. Main laying is customer driven and, although there has been a steady demand, site closures and a reduced workforce due to COVID-19 has resulted in a significantly reduced length of new mains. Whilst new mains lengths have been less than expected in year 1 of AMP7, it is expected that the housing market will continue to improve throughout the remainder of the AMP and the annual length of new mains laid will increase.

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**Table 4R**  
**Connected properties, customers and population**

Line description	Units	DPs	Unmeasured	Measured	Total	Voids		
Customer numbers - average during the year								
Residential water only customers	000s	3	53.701	57.180	110.881	5.261		
Residential wastewater only customers	000s	3	56.910	58.927	115.837	6.103		
Residential water and wastewater customers	000s	3	836.609	1150.798	1987.407	98.659		
Total residential customers	000s	3	947.220	1266.905	2214.125	110.023		
Business water only customers	000s	3	0.888	23.349	24.237	2.457		
Business wastewater only customers	000s	3	2.070	3.769	5.839	1.783		
Business water & wastewater customers	000s	3	12.569	81.709	94.278	18.849		
Total business customers	000s	3	15.527	108.827	124.354	23.089		
Total customers	000s	3	962.747	1375.732	2338.479	133.112		
	Water				Wastewater			
Line description	Units	DPs	Un-measured	Measured	Total	Un-measured	Measured	Total
Property numbers - average during the year								
Residential properties billed	000s	3	890.310	1207.978	2098.288	893.505	1209.725	2103.230
Residential void properties	000s	3			103.920			104.762
Total connected residential properties	000s	3			2202.208			2207.992
Business properties billed	000s	3	13.457	105.058	118.515	14.639	85.478	100.117
Business void properties	000s	3			21.306			20.632
Total connected business properties	000s	3			139.821			120.749
Total connected properties	000s	3			2342.029			2328.741

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## Table 4R – Continued

### Connected properties, customers and population

Line description	Units	DPs	Water								Total
			Unmeasured				Measured				
			No meter	Basic meter	Smart meter	Total	No meter	Basic meter	Smart meter	Total	
Property and meter numbers - at end of year											
Total new residential properties connected in year	000s	3	0.000	0.000	0.000	0.000	0.000	0.000	11.626	11.626	11.626
Total new business properties connected in year	000s	3	0.002	0.000	0.000	0.002	0.000	0.010	0.542	0.552	0.554
Residential properties billed at year end	000s	3	884.725	0.185	2.948	887.858	0.000	90.540	1139.977	1230.517	2118.375
Residential void properties at year end	000s	3				45.125				44.349	89.474
Total connected residential properties at year end	000s	3				932.983				1274.866	2207.849
Business properties billed at year end	000s	3	13.196	0.000	0.000	13.196	0.000	25.917	78.383	104.300	117.496
Business void properties at year end	000s	3				5.537				16.690	22.227
Total connected business properties at year end	000s	3				18.733				120.990	139.723
Total connected properties at year end	000s	3				951.716				1395.856	2347.572
Line description	Units	DPs	Water	Wastewater							
Population data											
Resident population	000s	3	5189.884	5199.196							
Business population	000s	3		46.724							

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## Connected properties, customers, and population

**4R.1-12, 16-17, 19-21 & 25:** The reported values across these data items have been heavily impacted by COVID-19 with the volumes being lower than previous years. The reason COVID-19 had an impact on these volumes is due to the national lockdown and the impact on the construction industry. This year we applied additional focus on how we manage void properties which has resulted in an overall reduction. We have also seen a reduction in the decline of billed unmeasured households due to void unmeasured properties being transferred into the billed category.

**4R.13:** The number non-household properties billed for water during 2020/2021 has decreased by 1.48% compared to 2019/2020, with properties billed for wastewater decreasing by 1.30% when comparing the same periods. This is due to our void non-household property volumes increasing due to the impact of COVID-19.

**4R.14:** The non-household void volumes for 2020/2021 have increased due to the impact of COVID-19. We have been working alongside all our Retailers throughout 2020/2021 to ensure the occupancy status of our properties are accurate.

**4R.15:** The total non-household connected properties for water and wastewater are in line with expectations. New connections, gap sites and change of use properties are usually offset by deregistered properties so the volumes don't significantly change from year to year.

**4R.18:** The number of new connected non-household properties for water have reduced by 46.53% during 2020/2021 when compared to 2019/2020. This is due to the impact COVID-19 had on our Developer Services during the lockdown months.

**4R.22:** The total non-household properties billed for water at 2020/2021 year end was 117,496. This is a 2,800-reduction compared to 2019/2020. A major factor for this reduction is because a higher percentage of our customer base is now vacant due to the impact of COVID-19. Vacant premises are excluded from the calculation meaning a larger volume have been excluded this year when compared to previous years. The measured split of this total volume is 104,300 with 13,196 unmeasured properties.

**4R.23:** The total number of non-household void properties connected for water in 2020/2021 is 22,227 with 16,690 being against measured properties and 5,537 against unmeasured properties.

This total is an increase of 1,982 when compared to 2019/2020. The reason for the increase in void properties is due to the impact COVID-19 has had on our customer base. Continuous work is carried out to identify void properties using consumption information to understand whether there are un-registered owners or leaks to investigate and correct.

**4R.24:** This is a calculated cell using the non-household data within Table 4R.

**4R.26:** The total water household population for 2020/2021 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. The total reported water residential population has increased by approximately 116,000 people (2.3%) since last year. A large proportion of this increase is a result of three improvements in the calculation:

- We now use an annual update of occupancy which is more accurate. This is estimated to have increased our household population estimate by approximately 14,000 people.
- We now include an estimate of the 'hidden and transient' population which has added approximately 75,000 people to our population.
- Our estimate of the communal population is approximately 14,000 people less than in 2019/2020 due to a refresh of the data sources.

**4R.27:** We have used ONS data to help calculate this data and understand the impact COVID-19 has had on this figure. Data shows that approximately 33% of accommodation rooms were occupied in the months impacted by COVID-19 for 2019/2020. Using the same percentage assumption for 2020/2021 against previous years volume, the total calculates at 15,366. For more information, please visit:

# 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.

**Table 5A:** Water resources asset and volumes data

**Table 5B:** Water resources operating cost analysis

**Table 5A****Water resources asset and volumes data for the 12 months ended 31st March 2021**

Line description	Units	DPs	Input
<b>Water resources</b>			
Water from impounding reservoirs	MI/d	2	583.58
Water from pumped storage reservoirs	MI/d	2	7.73
Water from river abstractions	MI/d	2	453.01
Water from groundwater works,excluding managed aquifer recharge (MAR) water supply schemes	MI/d	2	274.23
Water from artificial recharge (AR) water supply schemes	MI/d	2	0.00
Water from aquifer storage and recovery (ASR) water supply schemes	MI/d	2	0.00
Water from saline abstractions	MI/d	2	0.00
Water from water reuse schemes	MI/d	2	0.00
Number of impounding reservoirs	nr	0	39
Number of pumped storage reservoirs	nr	0	3
Number of river abstractions	nr	0	16
Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	nr	0	40
Number of artificial recharge (AR) water supply schemes	nr	0	0
Number of aquifer storage and recovery (ASR) water supply schemes	nr	0	0
Number of saline abstraction schemes	nr	0	0
Number of reuse schemes	nr	0	0
Total number of sources	nr	0	98
Total number of water reservoirs	nr	0	116
Total volumetric capacity of water reservoirs	MI	0	183496
Total number of intake and source pumping stations	nr	0	80
Total installed power capacity of intake and source pumping stations	kW	0	12597
Total length of raw water abstraction mains and other conveyors	km	2	73.93
Average pumping head – raw water abstraction	m.hd	2	10.41
Energy consumption – raw water abstraction	MWh	3	60392.51
Total number of raw water abstraction imports	nr	0	1
Water imported from 3rd parties' raw water abstraction systems	MI/d	2	0.00
Total number of raw water abstraction exports	nr	0	0
Water exported to 3rd parties' from raw water abstraction systems	MI/d	2	0.00
Water resources capacity (measured using water resources yield)	MI/d	2	1645.23

**5A.1-8:** We have 112 abstraction licences authorising abstraction from sources across the Yorkshire region. We are required to report the quantities abstracted annually to the Environment Agency, in April, for the financial reporting year. 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.

**Key**

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**5A.9:** For this data item, we are reporting number of sources of impounding reservoirs, not the actual number of impounding reservoirs for this measure. For example, some of our reservoirs are grouped into sources, depending on whether they have individual or group abstraction licences.

**5A.10:** There has been an increase of one against this measure when compared to 2019/2020. Eccup ESR, which supplies Headingley Water Treatment Works is the increase.

**5A.11-17:** No change when compared against the figure reported for 2019/2020.

**5A.18 & 19:** Due to balancing reservoirs, which support the raw water transport network, now reported in Table 6A.1 & 2, 13, reservoirs have been moved from this measure. This accounts for the reduction in this data item when compared to 2019/2020.

**5A.20 & 21:** Three additional pumping sites which had been omitted in previous years, are now included in our totals for these reporting lines.

- Cottingham Admit (raw water abstraction)
- Dunswell Admit (raw water abstraction)
- Springhead Admit (raw water transport)

These three sites had only been omitted from the pumping station numbers and capacities, not from average pumping head (APH) reporting lines. This was due to the sites being identified during the production of the APH reported line after the completion of the Pumping Station reporting lines.

We have also removed Ingbirchworth South BH (raw water abstraction) from the numbers of pumping station sites because this is not a pumped asset, the borehole is artesian. Water naturally discharges all year through the borehole outlet into Ingbirchworth reservoir. There is no operational pumping on site.

**5A.22:** There have been no new raw water mains laid this year and it is unusual for new raw mains to be laid. Over the years we have reduced the number of raw water sources feeding small treatment works and tended to lay more treated water mains to supply those areas from existing larger treatment works. Proactive cleansing of the data is carried out from time to time within our internal systems, and on occasion field operators will send in corrections to the data, which explains any changes in total mains lengths from year to year.

**5A.23:** We have improved our data reporting for 2020/2021 by:

- introducing a more automated data retrieval system, as recommended by our auditor,
- we have used additional data sourced for two stations (BUTTERLEY/NO 2 RPS, SLADEN VALLEY/2 WPS), with spot readings for lift taken by our pumps engineer,
- adapting our corporate AI2 system for storing site information required by the average pumping head assessment which was a recommendation from last year.
- increasing the data coverage from 404 of 639 sites (2020 data, 63%) to 435 of 644 sites (66%) to reduce the use of averaging i.e. additional five sites (AINDERBY/NO 3 BHS, FORTSHOT LANE/WPS, MOOR LANE GT OUSEBURN/WPS, PIPER HILL/KEPWICK WPS and SWILLINGTON/NO 2 WPS).

**5A.24:** Rainfall in April and May 2019 and April and May 2020 was below the long-term average (LTA). However, April and May 2020 were much drier and as a result reservoir stocks dropped below the EA consultation line in April. The lower reservoir stocks and the rate of decline triggered higher levels of raw water pumping to protect future water supplies and balance raw water stocks across the Region.

**5A.25 & 26:** There is one raw water abstraction import. Small volumes of water can be imported from the Canal & River Trust (CRT) as part of the Scammonden Agreement. This is a historic agreement dating back to 1965 and covers the water contained within CRT's March Haigh, Redbrook, Swellands and Tunnel End reservoirs near Marsden. These reservoirs can directly discharge water via overland watercourses into our catchwaters and into Butterley reservoir, when requested. The import is only requested very occasionally in dry weather conditions. The last time it was used was in the dry summer of 2018.

**5A.27 & 28:** There are no known raw water abstraction exports, both lines entered as zero.

**5A.29:** For 2020/2021, water resource capacity saw a volume of 1645.23 MI/d, a decrease of 2.81 MI/d when compared to the 2019/2020 volume of 1648.04 MI/d. This decrease is due to the assumed yearly reduction caused to the impact of climate change.



**Table 5B****Water resources operating cost analysis for the 12 months ended 31st March 2021**

Line description	Units	DPs	Im-pounding 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
<b>Opex analysis</b>										
Power	£m	3	0.175	0.049	0.618	1.702	0.000	0.000	0.000	2.544
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Abstraction charges/discharge consents	£m	3	3.783	0.000	0.002	1.602	0.000	0.000	0.000	5.387
Bulk supply	£m	3	3.885	0.000	0.000	0.000	0.000	0.000	0.000	3.885
<b>Other operating expenditure</b>										
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other operating expenditure excluding renewals - direct	£m	3	2.424	0.000	0.001	1.025	0.000	0.000	0.000	3.450
Other operating expenditure excluding renewals - indirect	£m	3	4.685	0.000	0.002	1.981	0.000	0.000	0.000	6.668
Local authority and Cumulo rates	£m	3	5.652	0.000	0.002	2.393	0.000	0.000	0.000	8.047
Total operating expenditure (excluding 3rd party)	£m	3	20.604	0.049	0.625	8.703	0.000	0.000	0.000	29.981

This table is a further disaggregation of water resources data contained within 4J and reconciles to line 14. To allocate these costs, all relevant assets were classified according to the tables in line with RAG 4.09.

### Technical notes

In 2019/2020 this information was presented in Table 4V.

Total operating costs for water resources price control have increased in 2020/2021, refer to Table 4D for detailed commentary.

### Key

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Please refer to RAG 4.09 – 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.

**Table 6A:** Raw water transport, raw water storage and water treatment data

**Table 6B:** Treated water distribution – assets and operations

**Table 6C:** Water network+ – Mains, communication pipes and other data

**Table 6D:** Demand management – Metering and leakage activities

**Table 6A**

**Raw water transport, raw water storage and water treatment data for the 12 months ended 31st March 2021**

Line description	Units	DPs	Input		
Raw water transport and storage					
Total number of balancing reservoirs	nr	0	13		
Total volumetric capacity of balancing reservoirs	MI	0	3836		
Total number of raw water transport stations	nr	0	38		
Total installed power capacity of raw water transport pumping stations	kW	0	27950		
Total length of raw water transport mains and other conveyors	km	2	1393.77		
Average pumping head ~ raw water transport	m.hd	2	20.18		
Energy consumption ~ raw water transport	MWh	3	44,146.663		
Total number of raw water transport imports	nr	0	1		
Water imported from 3rd parties' raw water transport systems	MI/d	2	57.33		
Total number of raw water transport exports	nr	0	1		
Water exported to 3rd parties' raw water transport systems	MI/d	2	3.08		
Total length of raw and pre-treated (non-potable) water transport mains for supplying customers	km	2	0.00		
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
All SD simple disinfection works		0.00	0	0.00	0
W1 works		0.00	0	0.00	0
W2 works		0.00	0	63.07	14
W3 works		434.94	13	28.99	3
W4 works		208.96	7	93.77	5
W5 works		391.24	7	69.31	1
W6 works		0.00	0	0.00	0
Water treatment - works size		% of total	Number of works		
	Units DPs	DI 1	nr 0		
WTWs in size band 1		0.4	6		
WTWs in size band 2		0.4	2		
WTWs in size band 3		3.2	7		
WTWs in size band 4		5.0	6		
WTWs in size band 5		25.8	15		
WTWs in size band 6		25.5	7		
WTWs in size band 7		16.0	3		
WTWs in size band 8		23.7	2		

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**Table 6A – Continued**

**Raw water transport, raw water storage and water treatment data for the 12 months ended 31st March 2021**

Line description	Units	DPs	Input
<b>Water treatment – other information</b>			
Total water treated at more than one type of works	MI/d	2	0.00
Number of treatment works requiring remedial action because of raw water deterioration	nr	0	1
Zonal population receiving water treated with orthophosphate	000's	3	5189.884
Average pumping head – water treatment	m.hd	2	13.92
Energy consumption ~ water treatment	MWh	3	83,136.087
Total number of water treatment imports	nr	0	0
Water imported from 3rd parties' water treatment works	MI/d	2	0.00
Total number of water treatment exports	nr	0	0
Water exported to 3rd parties' water treatment works	MI/d	2	0.00

**6A.1 & 2:** Where a reservoir has an abstraction licence, has its own natural catchment, supports another abstraction or it has 15 days or more of storage, it has been assessed as Water resources – raw water abstraction. This accounts for most of our reservoirs. Where a reservoir does not meet any of these requirements, it has been assessed as network+ – raw water storage i.e. balancing reservoirs which support the raw water transport network.

**6A.3 & 4:** Three additional raw water pumping sites which had been omitted in previous years, are now included.

- Cottingham Admit (raw water abstraction)
- Dunswell Admit (raw water abstraction)
- Springhead Admit (raw water transport)

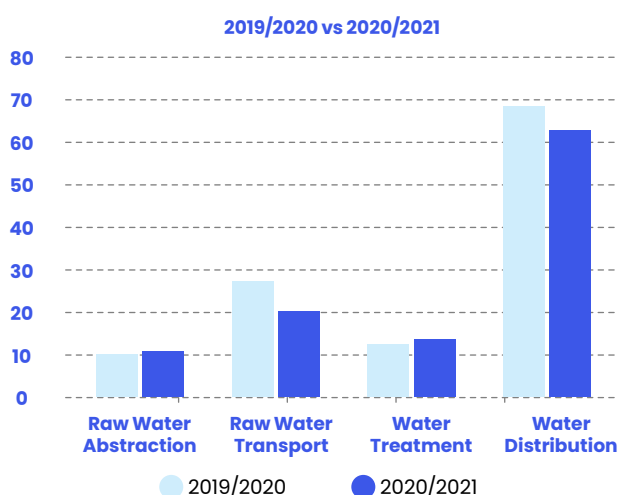
These three sites had only been omitted from the pumping station numbers and capacities, not from average pumping head (APH) reported lines. This was due to them being identified during the production of the APH line after the completion of the Pumping Station lines.

We have removed Ingbirchworth South BH (raw water abstraction) from the numbers of pumping station sites because this is not a pumped asset, the borehole is artesian. Water naturally discharges all year through the borehole outlet into Ingbirchworth reservoir. There is no operational pumping on site.

**6A.5:** The length of total raw water transport mains has reduced from 1452.59m to 1393.77m due to an improvement in our reporting process.

**6A.6:** We have improved our reporting process for this data item by using actual data as opposed to averages to calculate. Because of this, the result shows a reduction in the measure of raw water transport in 2020/2021 of 27%. The below table shows a comparison between 2019/2020 and 2020/2021:

	2019/ 2020	2020/ 2021	Comparison
Raw Water Abstraction	10.1	10.41	3.07%
Raw Water Transport	27.72	20.18	-27.20%
Water Treatment	12.52	13.92	11.18%
Water Distribution	68.64	63.25	-7.85%



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**6A.7:** Although the impact of COVID-19 reduced the use of company cars, the use of silver fleet vans increased considerably in 2020/2021. The negative impact on silver fleet was due to the need for single occupancy in vehicles as car sharing by colleagues was not permitted.

**6A.8 & 9:** Yorkshire Water has one raw water transport import, which is the bulk supply import from Severn Trent's Ladybower reservoir to our Rivelin Lower reservoir, this volume is estimated from meter readings. The bulk supply volume reported in Table 4A has been used to inform this line.

**6A.10 & 11:** There is one raw water transport export, which is part of our Scammonden Agreement. Under this agreement small volumes of water are exported to the Canal & River Trust at Huddersfield Narrow Canal in Marsden, mainly for topping up the canal during boating season. The supply to the canal is metered and is connected to our telemetry system.

The daily metered export volumes are stored in our ROD database and are monitored. This data has been used to provide the estimate reported and the volume reported is normal.

**6A.12:** We have zero kms against this data item for 2020/2021.

**6A.13-28:** North Newbald WTW and Littleworth are both GW2 category works which have not been used but are not decommissioned. These works are included, because even though the works have not been in use there is potential for them to come back into service, therefore they should be reported.

In 2020/2021, there have been no movements of WTWs between categories. A full breakdown and comparison over the prior performance years is presented in the Table below:

Water treatment analysis	Reporting Year	Surface water		Ground water	
		Water treated MI/d	Number of works	Water treated MI/d	Number of works
13. SD simple disinfection works	2020/2021	0	0	0	0
	2019/2020	0	0	0	0
	2018/2019	0	0	0	0
14. W1 works	2020/2021	0	0	0	0
	2019/2020	0	0	0	0
	2018/2019	0	0	0	0
15. W2 works	2020/2021	0	0	63.07	14
	2019/2020	0	0	60.79	14
	2018/2019	0	0	62.78	14
16. W3 works	2020/2021	434.94	13	28.99	3
	2019/2020	419.78	13	28.48	3
	2018/2019	447.18	14	30.09	3
17. W4 works	2020/2021	208.96	7	93.77	5
	2019/2020	189.21	7	92.66	5
	2018/2019	150.37	6	95.27	5
18. W5 works	2020/2021	391.24	7	69.31	1
	2019/2020	402.98	7	63.83	1
	2018/2019	444.9	7	64.45	1
19. W6 works	2020/2021	0	0	0	0
	2019/2020	0	0	0	0
	2018/2019	0	0	0	0

Water treatment works size	Reporting Year	% of Total DI	No of works
20. WTWs in band 1	2020/2021	0.4	6
	2019/2020	0.4	6
	2018/2019	0.3	5
21. WTWs in band 2	2020/2021	0.4	2
	2019/2020	0.4	2
	2018/2019	0.7	3
22. WTWs in band 3	2020/2021	3.2	7
	2019/2020	3.9	8
	2018/2019	3.9	8
23. WTWs in band 4	2020/2021	5	6
	2019/2020	5.6	6
	2018/2019	4.3	5
24. WTWs in band 5	2020/2021	25.8	15
	2019/2020	24.3	14
	2018/2019	23.3	14
25. WTWs in band 6	2020/2021	25.5	7
	2019/2020	29.5	8
	2018/2019	25.7	8
26. WTWs in band 7	2020/2021	16	3
	2019/2020	11.2	2
	2018/2019	17.1	3
27. WTWs in band 8	2020/2021	23.7	2
	2019/2020	24.7	2
	2018/2019	24.8	2
<b>Water treatment – other information</b>			
28. Water treated at more than one type of works MI/d	2020/2021	0	
	2019/2020	0	
	2018/2019	0	

**6A.29:** One treatment works required remedial action in 2020/2021 because of raw water deterioration which was at our Chellow Heights Water Treatment Works.

**6A.30:** 100% of the zonal population supplied by Yorkshire Water received water dosed with orthophosphate.

**6A.31:** There is minimal change to the reported figures for this reporting line, most of the lift figures used for assessing treatment APH, are engineers' assessments and haven't changed since 2019, as such the APH only changes due to flow differences at the water treatment works.

**6A.32:** Overall energy consumption for clean water has increased from 2019/2020 to 2020/2021 by 14.1%. A comparison on our usage on electricity, gas oil, kerosene, transport and natural gas is used to calculate this figure.

**6A.33–36:** There are zero water treatment imports or exports, these lines are reported as zero.

**Table 6B****Treated water distribution – assets and operations for the 12 months ended 31st March 2021**

Line description	Units	DPs	Input
<b>Assets and operations</b>			
Total installed power capacity of potable water pumping stations	kW	0	75749
Total volumetric capacity of service reservoirs	MI	1	2849.0
Total volumetric capacity of water towers	MI	1	29.0
Distribution input	MI/d	2	1283.77
Water delivered (non-potable)	MI/d	2	0.0000
Water delivered (potable)	MI/d	2	1068.34
Water delivered (billed measured residential)	MI/d	2	352.16
Water delivered (billed measured business)	MI/d	2	237.58
Total annual leakage	MI/d	2	289.80
Distribution losses	MI/d	2	213.28
Water taken unbilled	MI/d	2	40.09
Proportion of distribution input derived from impounding reservoirs	Propn 0 to 1	3	0.606
Proportion of distribution input derived from pumped storage reservoirs	Propn 0 to 1	3	0.139
Proportion of distribution input derived from river abstractions	Propn 0 to 1	3	0.057
Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	Propn 0 to 1	3	0.198
Proportion of distribution input derived from artificial recharge (AR) water supply schemes	Propn 0 to 1	3	0.000
Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	Propn 0 to 1	3	0.000
Proportion of distribution input derived from saline abstractions	Propn 0 to 1	3	0.000
Proportion of distribution input derived from water reuse schemes	Propn 0 to 1	3	0.000
Total number of potable water pumping stations that pump into and within the treated water distribution system	nr	0	527
Number of potable water pumping stations delivering treated groundwater into the treated water distribution system	nr	0	23
Number of potable water pumping stations delivering surface water into the treated water distribution system	nr	0	62
Number of potable water pumping stations that re-pump water already within the treated water distribution system	nr	0	442
Number of potable water pumping stations that pump water imported from a 3rd party supply into the treated water distribution system	nr	0	0
Total number of service reservoirs	nr	0	398
Number of water towers	nr	0	27
Energy consumption ~ treated water distribution	MWh	3	126700.581
Average pumping head – treated water distribution	m.hd	2	63.25
Total number of treated water distribution imports	nr	0	0
Water imported from 3rd parties' treated water distribution systems	MI/d	2	0.00
Total number of treated water distribution exports	nr	0	3
Water exported to 3rd parties' treated water distribution systems	MI/d	2	0.36

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**6B.1:** We have updated our reporting process for this data item and we're confident the new approach is reporting the correct kW Ratings for 2020/2021. This power capacity has increased by 5,240 kW in 2020/2021 to 2019/2020. In order to update our report, we took a number of samples, examining their power capacity. The figures recorded are displayed in our findings.

**6B.2:** There are 398 service reservoirs in 2020/2021, this figure is higher than the previous year by 30. The capacity of these is 2849ML with an increase of 634ML.

**6B.3:** There are 27 water towers in 2020/2021, this figure is the same as the previous year. The capacity of these is 29ML which is the same as the previous reporting year.

**6B.4:** Distribution Input and volume from water treatment was 1283.77ML/d in 2020/2021, 29.89 ML/d (approximately 2%) higher than in the previous report year. This was largely due to the increase in customer usage, in both measured and unmeasured households, as customer behaviour changed because of COVID-19 (see 6B.7). While non-household usage (see 6B.8) decreased between reporting years due to COVID-19, this drop was approximately half that of the increase in household usage. The significant winter and freeze thaw event occurring between January to March resulted in significant bursts on the network and increases in leakage which accounted for the increase in distribution input over these months.

**6B.5:** This line is reported as zero. As in previous years, we do not provide any non-potable supplies to either household or non-household customers.

**6B.6:** The total volume of potable water delivered was 1068.34ML/d in 2020/2021, 41.16ML/d higher than in the previous report year. This is primarily because household usage increased by approximately 69ML/d, and there was an increase in water taken unbilled (approximately 6ML/d, 6B.11). Some of this increase was offset by the decrease in non-household usage (approximately 35ML/d) and the decrease in leakage (approximately 11ML/d).

**6B.7:** The total volume of water delivered to billed measured households was 352.16ML/d in 2020/2021, 39.48ML/d (13%) higher than in the previous report year. Household usage, both measured and unmeasured, was significantly higher in 2020/2021 due to changes in customer behaviour and an early hot and dry summer.

The combination of local and national lockdowns due to COVID-19 meant that more of our customers were at home – through being furloughed, working from home, or not being able to attend school or university. For comparison, unmeasured residential water use increased by approximately 31ML/d (approximately 8%). We expect this volume to remain elevated due to the ongoing impact of COVID-19, and the increase in customers who are billed via a meter. We will continue to monitor our customer usage with our two residential measures (unmetered vs. metered customers).

**6B.8:** The total volume of water delivered to billed measured businesses was 237.58ML/d in 2020/2021, 35.38ML/d (13%) lower than in the previous report year. This is because COVID-19 restrictions led to long periods of closure for many commercial activities including hospitality, leisure and retail. We expect this volume to increase in 2021/2022 as the impact of COVID-19 decreases and businesses continue to re-open.

**6B.9:** This is the sum of distribution losses (including leakage from our trunk mains and service reservoirs) supply pipe leakage. Total reported leakage was 289.80ML/d in 2020/2021, having decreased since 2019/2020 by c.8.87ML/d (c.3 %).

**6B.10:** Distribution losses represent leakage on the company's distribution system, and therefore exclude supply pipe leakage. Total reported distribution losses were 213.28ML/d in 2020/2021, having decreased in 2020/2021 by 11.05ML/d (approximately 5 %) in the report year.

**6B.11:** Total water taken unbilled (legally and illegally) was 40.09ML/d in 2020/2021 and has increased by 5.84ML/d this year. This is primarily due to increases in water used at our own sites (e.g. sewage treatment works), and water taken illegally (e.g. use by occupied void properties).

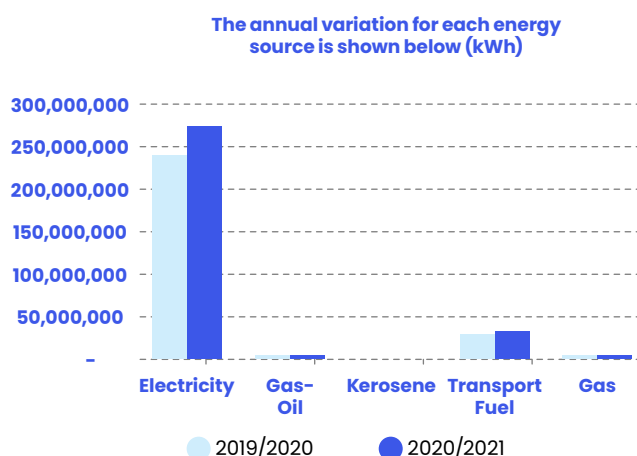
**6B.12-19:** The total distribution input for each water treatment works (WTW) has been obtained by linking to our 'Water into Supply' Distribution Input (DI) report. With each of our WTWs having a single source type, this has enabled the proportion of total DI from each type of source to be estimated and reported.

**6B.20-24:** 2019/2020 reporting saw a total of 531 water pumping stations. In 2020/2021, there has been an overall reduction in the number of pumping stations. They have reduced by four for where seven have been removed because of being single property boosters, one has been removed and four newly commissioned pumping stations have been added to give a total of 527.

**6B.25:** There are 398 service reservoirs in 2020/2021, this figure is higher than the previous year by 30. The capacity of these is 2,849ML with an increase of 634ML.

**6B.26:** There are 27 water towers in 2020/2021, this figure is the same as the previous year. The capacity of these is 29ML which is also the same as the previous reporting year.

**6B.27:** Overall energy consumption for clean water has increased from 2019/2020 to 2020/2021 by 14.1%. The annual variation for each energy source is shown below (kWh):



**Electricity:** Has increased by 15.2% from 237 GWh– 279 GWh. Electricity consumption is variable due to weather conditions and asset availability. We have continued to promote energy reduction at Yorkshire Water. Although this has not reduced the overall consumption, this has limited the increase within clean water.

**Kerosene:** Our Kerosene consumption has reduced by 30%. This is due to better use at site as well as moving to electric heating.

**Transport:** Although the impact of COVID-19 reduced the use of company cars, the use of silver fleet vans increased considerably this year. The negative impact on silver fleet was due to the need for single occupancy in vehicles as sharing was not permitted by colleagues.

**Gas Oil:** A strong focus has been applied to gas oil consumption this year at Yorkshire Water. Multiple improvements have been completed to alter thermostats and timers and convert to electric heating. This has resulted in a decrease of approximately 17% on last year's figures for sites and 37% when accounting for company consumption that's split across price controls.

**6B.28:** There are four pumping stations being reported that weren't reported last year, three newly commissioned, and one showing telemetry data this year that we had missed in 2019/2020.

**6B.29 & 30:** We have no treated water distribution imports, lines entered as zero.

**6B.31 & 32:** There are three treated water distribution exports from Yorkshire Water:

- Farningley Green to Anglian Water
- Bradway Grange to Severn Trent Water
- IWNL NAV (new appointment and variation)

We expect more NAVs coming to receive these imports from us during the AMP, with at least two more NAVs currently in the pipeline. There are no other changes anticipated.

**Table 6C**

**Water network+ – Mains, communication pipes and other data for the 12 months ended 31st March 2021**

Line description	Units	DPs	Input
<b>Treated water distribution – mains analysis</b>			
Total length of potable mains as at 31 March	km	1	32012.1
Total length of potable mains relined	km	1	0.0
Total length of potable mains renewed	km	1	30.6
Total length of new potable mains	km	1	78.8
Total length of potable water mains (≤320mm)	km	1	29659.3
Total length of potable water mains >320mm and ≤ 450mm	km	1	993.0
Total length of potable water mains >450mm and ≤610mm	km	1	844.8
Total length of potable water mains > 610mm	km	1	515.1
<b>Communication pipes</b>			
Number of lead communication pipes	nr	0	1268309
Number of galvanised iron communication pipes	nr	0	1955
Number of other communication pipes	nr	0	918827
<b>Treated water distribution – mains age profile</b>			
Total length of potable mains laid or structurally refurbished pre-1880	km	1	345.9
Total length of potable mains laid or structurally refurbished between 1881 and 1900	km	1	1872.6
Total length of potable mains laid or structurally refurbished between 1901 and 1920	km	1	814.7
Total length of potable mains laid or structurally refurbished between 1921 and 1940	km	1	4663.6
Total length of potable mains laid or structurally refurbished between 1941 and 1960	km	1	8894.8
Total length of potable mains laid or structurally refurbished between 1961 and 1980	km	1	5129.8
Total length of potable mains laid or structurally refurbished between 1981 and 2000	km	1	6449.3
Total length of potable mains laid or structurally refurbished post 2001	km	0	3815
<b>Other</b>			
Company area	km <sup>2</sup>	0	14290
Number of lead communication pipes replaced for water quality	nr	0	1146
Supply-side improvements delivering benefits in 2020-25	MI/d	2	0.00
Demand-side improvements delivering benefits in 2020-25 (excluding leakage and metering)	MI/d	2	0.00
Leakage improvements delivering benefits in 2020-25	MI/d	2	8.90
Internal interconnectors delivering benefits in 2020-25	MI/d	2	0.00
Event Risk Index	nr	0	91

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**6C.1:** Our length of potable mains saw an increase of 121.2 km compared to 2019/2020. The average increase year-on-year is 95 km so 2020/2021 was slightly higher than our average but still in line with expectations for the year.

**6C.2:** This measure shows a reduction of 0.1 km from 2019/2020. No clean water mains have been relined in 2020/2021 due to a lack of lining material which was an impact of COVID-19. We are working with Radius and are seeking approval from the Water Research Centre and Water UK to begin using a new liner (FLP2). We are expecting the length of mains relined to significantly increase in 2021/2022.

**6C.3:** This measure shows an increase of 11.38 km from 2019/2020. The bulk of our AMP7 year 1 Programme has been structural work, involving the replacement of ageing assets. The lack of relining material which was an impact of COVID-19, has resulted in us needing to take this approach.

**6C.4:** This data is made up of both requisition and self-lay mains which have been laid under the statutory mainlaying scheme. There has been a 27% decrease in the length of new mains laid in comparison to last year which is due to the significant impact COVID-19 has had on the building industry. Main laying is customer driven and, although there has been demand, site closures and reduced workforce has resulted in a significantly reduced outturn.

**6C.5:** This measure shows the length/percentage makeup of the diameter of Yorkshire Water's live mains carrying treated water. The relatively tiny amount of pipework we add each year means that these percentages stay stable. This category makes up 92.65% of our total.

**6C.6:** This measure shows the length/percentage makeup of the diameter of Yorkshire Water's live mains carrying treated water. The relatively tiny amount of pipework we add each year means that these percentages remain stable. This category makes up 3.1% of our total.

**6C.7:** This measure shows the length/percentage makeup of the diameter of Yorkshire Water's live mains carrying treated water. The relatively tiny amount of pipework we add each year means that these percentages remain stable. This category makes up 2.64% of our total.

**6C.8:** This measure shows the length/percentage makeup of the diameter of Yorkshire Water's live mains carrying treated water. The relatively tiny amount of pipework we add each year means that these percentages remain stable. This category makes up 1.61% of our total.

**6C.9:** For 2020/2021, there has been an increase in the number of lead communication pipes replaced compared to last year due to our AMP7 lead replacement programme.

**6C.10:** The number of galvanised iron communication pipes has reduced year-on-year due to our continued drive on active leakage reduction and targeted communication with customers.

**6C.11:** The number of other communication pipes is made up of alkathene, copper, MDPE and cast iron. The number of other communication pipes has increased as expected due to all new and replacement communication pipes being replaced with MDPE. We expect to see alkathene, copper and cast-iron communication pipes to reduce year on year because of this.

**6C.12-19:** Our data shows 76% of our live pipes carrying treated water were laid after 1940. It is also showing that mains laid before year 2000 are slowly being replaced or rehabilitated using structural Hi-build method. There are very small changes year-on-year across the age categories and we would expect this to continue at a steady pace.

**6C.20:** The Yorkshire Water area, based on our Clean Water boundaries, are in line with data reported previously. The process for determining the area required clean water 'New Appointments and Variations' (NAV) to be deducted from our total. The identified total area related to clean water NAVs was 4 km<sup>2</sup> and this has been deducted from the overall Yorkshire Water area.

**6C.21:** There has been an increase in lead pipe improvements this year from a new programme of work starting for AMP7. The Programme is on track to meet the Regulatory Output of ensuring the selected areas and list properties have the lead pipes renewed to meet the Water Quality sampling standard by November 2023, as committed to DWI.

**6C.22 & 23:** This year, we have reported zero for both these reported lines. The only year of AMP7 where this item is relevant is 2022/2023 where we plan to apply for an increase to an existing groundwater licence to improve resilience.

**6C.24:** Our largest improvement has been made in the reduction of leakage on our upstream/trunk main network. There has been a 16Ml/d reduction in benefits this last year and significant improvements in our methodology, reporting and leakage detection practices on this network.

**6C.25:** This year, we have reported zero for this measure. The only year of AMP7 where this item is relevant is 2022/2023 where we plan to apply for an increase to an existing groundwater licence to improve resilience.

**6C.26:** Our final Event Risk Index (ERI) score was 91.1 for 2020/2021 which has been confirmed by the DWI. The nature of ERI is that it is a variable measure, and we are unable to forecast future performance. Our experience in 2020 is that there can be significant impact on ERI even where all parties agree there was no impact on customers. In all cases, prevention of the occurrence of a potential event is the best outcome.

**Table 6D****Demand management – Metering and leakage activities for the 12 months ended 31 March 2021**

Line description	Units	DPs	Basic meter	Smart meter	
Metering activities - Totex expenditure					
New optant meter installation	£m	3	0.000	4.087	
New selective meter installation	£m	3	0.000	0.064	
New business meter installation	£m	3	0.002	0.024	
Residential meters renewed	£m	3	0.000	0.828	
Business meters renewed	£m	3	0.029	0.358	
Metering activities - Explanatory variables					
New optant meters installed	000s	3	0.000	17.804	
New selective meters installed	000s	3	0.001	0.392	
New business meters installed	000s	3	0.077	0.357	
Residential meters renewed	000s	3	0.002	2.126	
Business meters renewed	000s	3	0.178	1.267	
New residential meters installation – supply-demand balance benefit	MI/d	2	0.00	0.13	
New business meters installation – supply-demand balance benefit	MI/d	2	0.00	0.00	
Residential meters renewed – supply-demand balance benefit	MI/d	2		0.00	
Business meters renewed – supply-demand balance benefit	MI/d	2		0.00	
Residential properties – meter penetration	%	1	4.3	54	
Leakage activities - Totex expenditure	Units	DPs	Maintaining leakage	Reducing leakage	Total
Total leakage activity	£m	3	26.187	23.336	49.523
Per capita consumption (excluding supply pipe leakage)					
Per capita consumption (measured customers)	l/h/d	2	117.33		
Per capita consumption (unmeasured customers)	l/h/d	2	169.27		

**6D.1–5:** The ‘Metering activities – Totex expenditure’ is the cost element behind the volumes reported within data items 6D.6 to 6D.10. All the values reported within these data items are wholly made up of Capex and do not include any Opex costs.

**6D.6:** In 2020/2021, we have installed 17,804 new optant meters. The supply demand balance benefit of these optant meters has been estimated based on the WRMP19 demand management option that assumes 65% less water use than average unmeasured household consumption, followed by an additional 5% reduction in use once customers have switched to a measured supply.

For all smart meters reported within Table 6D, they can be read remotely. The main benefits of these meter types include a higher read rate meaning more accurate billing for our customers, which helps us manage our water resource management plan by being able to understand flow rates.

**6D.7:** We do not have a policy of selective metering, therefore all selective meters reported are those fitted as part of the smart metering trial. Within the trial 392 selective smart meters have been fitted at unmeasured household properties. These meters are not for charging purposes, but as part of a parallel water efficiency project. Our customers will be able to view their consumption and will be offered water

**Key**

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saving advice and devices. This may result in a supply-demand balance benefit in the future, but as this information sharing has not started, no supply demand benefit can be reported for 2020/2021.

**6D.8:** The reported value in 6D.8 relates to all new meters installed at business properties, excluding new connections and meter exchanges/renewals. The volumes are including 164 meters installed as part of a smart meter project which ran in the Sheffield region during 2020/2021. Overall, the volumes are in line with expectations.

**6D.9:** Yorkshire Water owns over 1.4m revenue meters installed for measuring consumption of both domestic (90%) and commercial (10%) consumers; this asset base is increasing by circa 40,000 meters per year through the Domestic Meter Optants Scheme and the New Fixes process. These meters have an estimated asset life of 15 years.

We have invested in each AMP to maintain our current meter stock by:

- Replacing asset life expired (circa 15 years +) where capital funding has been available.
- Replacing manually read meters with an automated meter reading (AMR) enabled meter where there is a health and safety risk.
- Replacing damaged meters when required.

As metering coverage grows so does the level of base maintenance in these assets. The impact of COVID-19 has resulted in achieving 45% of our 2020/2021 meter renewal forecast. This was due to reduced access to customer properties to identify an issue with a meter or to resolve an issue.

**6D.10:** Of the total number of commercial meters renewed this year, 769 of these were renewed as part of a smart meter trial we conducted throughout 2020/2021.

**6D.11:** This line provides the combined estimated benefit from new optant and selective meter fitting, as reported in lines 6D.6 and 6D.7.

**6D.12:** As a result of comprehensive metering programmes in the past, there are only a small number of unmetered business properties, approximately 14,000 properties compared to 107,000 metered properties. The remaining unmetered customers include a range of properties with low or irregular use (that have an annual fixed charge, such as church halls, farm troughs), mixed use properties (such as domestic flats above small commercial premises) and council houses. A review of water use at these properties in 2017 estimated an average daily

water use of 125 litres/property/day (total daily consumption for all properties less than 2Ml/d).

During 2020/2021, we have fitted 62 basic and 208 smart meters at previously unmetered non-business properties. Based on an average use of 125 litres/property/day, any supply demand benefit due to increased awareness of water use and subsequent water efficiency is considered immaterial, and zero Ml/d has been reported for this line.

As part of a smart metering trial in the Sheffield area, 164 additional new meters have been fitted at businesses properties. These meters will be used for charging purposes and could give a water efficiency benefit if there is a sufficiently significant bill impact compared to the previous unmetered charge. However, again, this water saving is considered immaterial based on estimated average daily water use at these properties prior to meter fitting.

**6D.13:** In 2020/2021, we renewed 2,128 residential meters. Of these, 2,122 were faulty meter exchanges as two basic meters and 2,120 smart meter renewals. Six were proactive renewals for health and safety reasons.

**6D.14:** In 2020/2021, we renewed 676 business meters (non-smart meter trial volume). Of these, 648 were faulty meter exchanges (one basic meter and 647 smart meter renewals) and 28 were renewed for health and safety purposes.

Meter renewal provides several benefits, including reducing inaccurate readings, and meter under registration and provides more accurate and timely bills. However, the renewal of 676 meters is not considered to provide a material benefit in terms of the supply demand balance and zero benefit is reported for this financial year.

**6D.15:** This percentage of meter penetration has been calculated using a methodology that aligns with the WRMP requirements and excludes all void properties.

The calculated percentages include meters fitted at unmeasured and measured residential properties. Some properties are fitted with basic and smart meters but continue to pay for water as an unmeasured supply (for example domestic meter optant properties that have subsequently opted to return to an unmetered charge).

Our data shows that at the end of the report year 2020/2021, 53.8% of residential properties (excluding void properties) were fitted with a smart meter and 4.3% have a basic meter fitted.



This is a new report line for APR21 so there is no comparable APR data for previous years. However, in the Annual Review of the WRMP in 2019/2020 we reported a total household meter penetration (excluding voids) of 55.8%, which means there has been increase of 2.3% this year.

**6D.16:** The 'Maintaining leakage' data item is made up of 18.308 of Opex and 7.879 of Capex to equal the reported 26.187 of Totex. The 'Reducing leakage' data item is wholly made up of 23.336 of Opex.

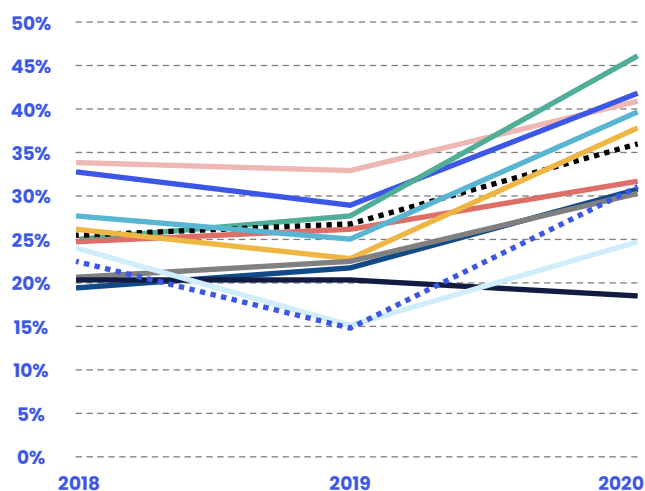
**6D.17 & 18:** In 2020/2021:

- Measured PCC (6D.17) was 114.46 l/h/d, an increase of 10.74 l/h/d (c. 10%).
- Unmeasured PCC (6D.18) was 168.48 l/h/d, an increase of 17.11 l/h/d (c. 11%).

Household water usage was significantly higher in 2020/2021 due to changes in customer behaviour and an early hot and dry summer. The combination of local and national lockdowns due to COVID-19 meant that more customers were at home more than usual, through being furloughed, working from home, or not being able to attend school or university.

PCC also increased this year due to warm, sunny and dry weather in the early summer of 2020. The weather was cooler and wetter in late June into July, and household usage dropped. This also coincided with the reopening of hospitality sector on 4 July 2020, and more of our customers returned to work, and others spent more time outside of their homes, reducing the average PCC. 'Travel corridors' were also introduced from 6 July 2020 (international travel had been limited to only 'essential' travel since 17 March), and holiday bookings increased, again enabling our customers to spend more time away from home and therefore reduce their household usage.

### % 'has worked from home'



ONS Labour Productivity data, 2011-2020



# 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:

**Table 7A:** Wastewater network+ – Functional expenditure

**Table 7B:** Wastewater network+ – Large sewage treatment works

**Table 7C:** Wastewater network+ – Sewer and volume data

**Table 7D:** Wastewater network+ – Sewage treatment works data

**Table 7E:** Wastewater network+ – Energy consumption and other data

**Table 7A****Wastewater network+ – Functional expenditure for the 12 months ended 31st March 2021**

Line description	Units	DPs	£'000
<b>Costs of STWs in size bands 1 to 5</b>			
Direct costs of STWs in size band 1	000s	3	2756.622
Direct costs of STWs in size band 2	000s	3	1422.733
Direct costs of STWs in size band 3	000s	3	4366.432
Direct costs of STWs in size band 4	000s	3	5108.693
Direct costs of STWs in size band 5	000s	3	9510.699
General & support costs of STWs in size bands 1 to 5	000s	3	4271.876
Functional expenditure of STWs in size bands 1 to 5	000s	3	27437.055
<b>Costs of large STWs (size band 6)</b>			
Service charges for STWs in size band 6	000s	3	2439
Estimated terminal pumping costs size band 6 works	000s	3	857
Other direct costs of STWs in size band 6	000s	3	41794
Direct costs of STWs in size band 6	000s	3	45090
General & support costs of STWs in size band 6	000s	3	8592
Functional expenditure of STWs in size band 6	000s	3	53682
<b>Costs of STWs – all sizes</b>			
Total Functional expenditure for Sewage treatment	000s	3	81119.055

This table was introduced in AMP6 and analyses the costs of different size sewage treatment works. We have allocated all direct costs to site 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 4.09. 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.

## Technical notes

In 2019/2020 this information was presented in Table 4N.

### Key

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## Table 7B

### Wastewater network+ – Large sewage treatment works for the 12 months ended 31 March 2021

Due to the size of the data table, we have published Table 7B separately on our website here:

**7B.1:** Compared with 2019/2020, the sites reported in this reporting line have remained the same.

**7B.2:** There have been no changes in treatment type between 2020/2021 and 2019/2020 at our large works.

**7B.3:** There has been some slight variations in the population equivalent of total load received, with the vast majority within a 10% variation. Load can vary due to changes in resident population and trade loads received to the works, both of which fluctuate year-on-year so these changes are within expected tolerances. The one site which has shown an exceptional change is Malton Sewerage Treatment Works, where the load has decreased by 19.41%. Trade load at Malton Sewerage Treatment Works has reduced by 32.3% between 2019/2020 and 2020/2021. This primary change has been driven by a large reduction in load from one of our large user non-household customers.

**7B.4-8:** There has been no consent changes during 2020/2021 when compared to 2019/2020.

**7B.9:** The data item is calculated from the number in Table 7B.3. Converting population (1000s) to load of KG BOD5/Day is done using industry standard 60g BOD/head/day.

**7B.10:** Compared to 2019/2020, the overall volume of treated flow recorded at the Large Sewerage Treatment Works has shrank by an average of 5.28% which compares with the overall decrease in flow seen in the reporting period as shown in Table 7C.13.

This table follows on from 7A, lines 8-13. 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 reduced by one sewage treatment work which has fallen into Band 5 due to reduced loads. Key variances in total direct expenditure from 2019/2020 are included below. Please note that general and support expenditure has increased at all sites following as explained in Table 4E.

- Beverley- increase in costs of £0.5m (77%), as mitigation was required for the site following failure of some key assets. A capital solution is currently underway which will help the site functionality.
- Bradford Esholt –decrease in costs of £2.3m (35%), as in 2019/2020 there were additional costs for lane cleaning to help improve energy performance and reduce reactive blower maintenance costs, which have now been resolved. Furthermore, additional tankered waste for non-regulated activity has helped with improvements in fixed costs of the site.
- Brighthouse upper – reduction in costs of £1.3m (76%) is primarily due to the compliance focus required in 2019/2020 including significant repair and maintenance of wash water systems and site macerators following repeated failure of these assets. Furthermore, pump outage at this site was significant requiring mitigation to prevent pollution incidents.
- Deighton- decrease in costs of £0.3m (50%) due to increased support of the non-regulated activity, which has helped improve the fixed costs of the site.
- Dewsbury- an increase in costs of £0.9m (32%) due to mitigation required to support the consented pumps which are required to ensure pollution risks are kept to a minimum.

- Knostrop- a decrease in cost of £1.8m (35%) due to onsite capital activity to support a significant pollution incident. The capital scheme has supported the site whilst in its commissioning phase with consumables and contracted spend.
- Lundwood- an increase in direct costs of £0.2m (31%) due to issues associated with aeration on the secondary process of sewage treatment, temporarily alleviated through the use of on-hire surface aerators.
- Malton – this site has seen a decrease in total direct expenditure of £0.5m (71%) as for the last two consecutive years the site required mitigation of compliance due to additional loads to the site. The trade effluent team have enacted an enforcement policy with local traders which has meant the load is now more manageable for the site, which in turn has now improved site costs in the last two financial years.
- Neiley- an increase in costs of £0.2m (42%) due to a loss of containment experienced on site and requirements of a significant clean up work through local contractors and jetting teams.
- Salterhebble- an increase in costs of £0.1m (140%) at a site susceptible to power failures resulting in losing operability of key assets. The site has now a generator hired to support this until a permanent solution is put in place.
- South Elmsall- an increase in costs of £0.1m (33%) primarily due to additional resources required on site to manage compliance due to increased level of triggers and significant process changes on the sludge aspect of the site impacting sewage treatment costs.

## Technical notes

In 2019/2020 this information was presented in Table 4O.

## Table 7C

### Wastewater network+ – Sewer and volume data for the 12 months ended 31st March 2021

Line description	Units	DPs	Input
<b>Wastewater network</b>			
Connectable properties served by s101A schemes completed in the report year	nr	0	0
Number of s101A schemes completed in the report year	nr	0	0
Total pumping station capacity	kW	0	75897
Number of network pumping stations	nr	0	2554
Total number of sewer blockages	nr	0	25656
Total number of gravity sewer collapses	nr	0	736
Total number of sewer rising main bursts	nr	0	55
Number of combined sewer overflows	nr	0	2065
Number of emergency overflows	nr	0	595
Number of settled storm overflows	nr	0	176
Sewer age profile (constructed post 2001)	km	0	2254
Volume of trade effluent	MI/yr	2	16483.91
Volume of wastewater receiving treatment at sewage treatment works	MI/yr	2	685604.71
Length of gravity sewers rehabilitated	km	0	26
Length of rising mains replaced or structurally refurbished	km	0	0
Length of foul (only) public sewers	km	0	5385
Length of surface water (only) public sewers	km	0	7540
Length of combined public sewers	km	0	16264
Length of rising mains	km	0	1280
Length of other wastewater network pipework	km	0	354
Total length of "legacy" public sewers as at 31 March	km	0	30823
Length of formerly private sewers and lateral drains (s105A sewers)	km	0	21,560

**7C.1 & 2:** This is a zero input for 2020/2021

**7C.3:** This measure has increased in 2020/2021 to 75,897 from 70,018 in 2019/2020, a change of 8.3%. The change can be accounted for an improved level of information from 37 sites where previously we had limited information. In 2020/2021, we have obtained updates that have allowed us to replace average pumping station capacities with actual capacities which has resulted in better accuracy of our data.

**7C.4:** This measure has increased by 0.7% for 2020/2021 when compared to 2019/2020 as we have built 23 new assets in 2020/2021.

**7C.5:** The reported reduction from 2019/2020 to 2020/2021 is a 20% reduction. This improvement is driven from an improved reporting process and a proactive program of operational cleansing and defect resolution conducted in historic high/poor performing areas for sewer flooding.

**7C.6:** The total number of sewer collapses on our legacy and transferred network assets for 2020/2021 is 736. This reporting is based on a new definition of sewer collapses for AMP7 so there is no historic performance data.

**7C.7:** The total number of sewers rising main bursts on our legacy and transferred network for 2020/2021 is 55. This reporting to a new definition of sewer collapses for AMP7 so there is no historic performance data.

#### Key

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**7C.8:** This measure has decreased by 0.14% for 2020/2021 when compared to 2019/2020. This decrease is associated with an improved data set on consented overflows.

**7C.9:** This measure has decreased by 1.1% for 2020/2021 when compared to 2019/2020. This is in line with previous years changes and is due to improved information about our asset base.

**7C.10:** This measure has decreased by 7.3% for 2020/2021 when compared to 2019/2020. This is associated with an improved data set on consented overflows.

**7C.11:** This measure increased by 30.4 km when compared to 2019/2020s reported 2,223.57 km. During 2020/2021, 20.8 km of sewer was replaced with 4.5 km of new sewers being installed.

**7C.12:** This measure has decreased by 11.32% for 2020/2021 when compared to 2019/2020. This large change was expected as industry has been significantly impacted by closure due to the pandemic, with many trade customers ceasing production for a several months.

**7C.13:** This measure has decreased by 8.11% for 2020/2021 when compared to 2019/2020. Much of the variance seen between reporting years is driven by weather, but trade effluent will also account for a small proportion of the variability. As described in Table 7C.12, the volumes from trade customers has dropped significantly in this reporting period. In addition to this, there is one less day's volume captured across all the STWs as APR20 was a leap year.

**7C.14:** This is a reduction of 0.81 km from the 2019/2020 reported figure. We are pleased that the Service Delivery Programme has been largely unaffected by COVID-19. In order to calculate this, we use laid drawings provided by the contract partners. These include total length measurements.

**7C.15:** This is a reduction of 1.54 km from the 2019/2020 reported figure. We are pleased that the Service Delivery Programme has been largely unaffected by COVID-19. 'Structural refurbished' would be where we use a structural liner in the pipe and using the existing pipe as a host.

**7C.16:** This measure has increased by 0.52% for 2020/2021 when compared to 2019/2020. The changes are largely due to improved information about our existing asset base and the adoption of new assets.

**7C.17:** This measure has increased by 0.4% for 2020/2021 when compared to 2019/2020. The changes are largely due to improved information about our existing asset base and the adoption of new assets.

**7C.18:** This measure has decreased by 0.1% for 2020/2021 when compared to 2019/2020. During 2020/2021, a programme of work was undertaken to identify and remove where duplicate lengths of main had been recorded. Following this exercise, the public sewer accounted for the largest change seeing a reduction of 0.2 km from the previous reported figure.

**7C.19:** Our length of rising mains has increased by 0.1% for 2020/2021 compared to 2019/2020. This is largely due to improved information about our existing asset base and the adoption of new assets. A project throughout 2020/2021 to survey rising mains and associated furniture has resulted in the improved information on our asset base.

**7C.20:** This measure has increased by 0.3% for 2020/2021 when compared to 2019/2020. The changes are largely due to improved information about our existing asset base and the adoption of new assets.

**7C.21:** This measure has increased by 0.22% for 2020/2021 when compared to 2019/2020. The changes are largely due to improved information about our existing asset base and the adoption of new assets.

**7C.22:** This remains unchanged from the figure reported at transfer of assets in 2011 set at 21,560 km. The total length of these assets confirmed and mapped has increased from 2,622 km in 2019/2020 to 2,852 km in 2020/2021. The total mapped transferred length as a percentage of the estimated total length of transferred network set in 2011 is 13.23% of total.



Table 7D

Wastewater network+ – Sewage treatment works data for the 12 months ended 31st March 2021

Line description	Units	DPs	Primary	Treatment categories						Total
				Activated Sludge	Biological	Tertiary				
						A1	A2	B1	B2	
Load received at sewage treatment works										
Load received by STWs in size band 1	kg BOD5/day	0	65	362	1144	48	0	63	0	1682.000
Load received by STWs in size band 2	kg BOD5/day	0	19	270	818	21	24	174	85	1411.000
Load received by STWs in size band 3	kg BOD5/day	0	148	860	2380	163	248	687	1151	5637.000
Load received by STWs in size band 4	kg BOD5/day	0	0	3730	8076	862	3170	1325	4421	21584.000
Load received by STWs in size band 5	kg BOD5/day	0	0	10293	12669	3476	4806	2811	8692	42747.000
Load received by STWs above size band 5	kg BOD5/day	0	0	190210	18614	5964	57321	2238	1599	275946.000
Total load received	kg BOD5/day	0	232.000	205725.000	43701.000	10534.000	65569.000	7298.000	15948.000	349007.000
Load received from trade effluent customers at treatment works	kg BOD5/day	0								43554
Number of sewage treatment works										
STWs in size band 1	nr	0	32	68	201	3	0	7	0	311.000
STWs in size band 2	nr	0	1	12	37	1	1	7	4	63.000
STWs in size band 3	nr	0	3	11	39	2	4	12	12	83.000
STWs in size band 4	nr	0	0	12	28	2	9	6	16	73.000
STWs in size band 5	nr	0	0	9	14	3	5	3	8	42.000
STWs above size band 5	nr	0	0	18	6	3	6	1	1	35.000
Total number of works	nr	0	36.000	130.000	325.000	14.000	25.000	36.000	41.000	607.000

Key

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Table 7D – Continued  
Wastewater network+ – Sewage treatment works data for the 12 months ended 31st March 2021

Line description	Units	DPs	Primary
Population equivalent			
Current population equivalent served by STWs	000s	3	5809.878
Current population equivalent served by filter bed or activated sludge STWs with tightened/new P consents	000s	3	12.122
Current population equivalent served by STWs with tightened/new N consents	000s	3	0.000
Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	3	0.000
Current population equivalent served by STWs with tightened/new UV consents	000s	3	0.000
Population equivalent treatment capacity enhancement	000s	3	0.000
Current population equivalent served by STW with tightened/new consents for chemicals	000s	3	0.000
Cumulative shortfall in FFT addressed by WINEP/NEP schemes to increase STW capacity	l/s	3	0.000
Additional storm tank capacity provided at STWs	m3	3	0.000
Additional volume of network storage at CSOs etc to reduce spill frequency	m3	3	0.000

Key

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Table 7D – Continued  
Wastewater network+ – Sewage treatment works data for the 12 months ended 31st March 2021

		Treatment works consents																	
Line description	Units	DPs	Phosphorus					BOD <sub>5</sub>						Ammonia					
			<=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
Load received at sewage treatment works																			
Load received by STWs in size band 1	kg BOD5/day	0	0	0	0	1681	1681.000	0	0	25	154	1503	1682.000	0	0	11	207	1464	1682.000
Load received by STWs in size band 2	kg BOD5/day	0	0	21	0	1390	1411.000	0	0	231	693	487	1411.000	0	25	276	658	453	1412.000
Load received by STWs in size band 3	kg BOD5/day	0	250	0	456	4932	5638.000	0	155	1696	3479	307	5637.000	0	111	2237	2693	597	5638.000
Load received by STWs in size band 4	kg BOD5/day	0	1797	902	337	18550	21586.000	0	1438	4968	11074	4105	21585.000	0	2469	6471	7120	5526	21586.000
Load received by STWs in size band 5	kg BOD5/day	0	4043	2761	4712	31232	42748.000	0	4424	14267	21367	2690	42748.000	0	7290	21801	6064	7592	42747.000
Load received by STWs above size band 5	kg BOD5/day	0	0	1599	0	274347	275946.000	0	24042	129350	84007	38547	275946.000	5122	135375	88801	8101	38547	275946.000
Total load received	kg BOD5/day	0	6090.000	5283.000	5505.000	332132.000	349010.000	0.000	30059.000	150537.000	120774.000	47639.000	349009.000	5122.000	145270.000	119597.000	24843.000	54179.000	349011.000
Load received from trade effluent customers at treatment works	kg BOD5/day	0																	
Number of sewage treatment works																			
STWs in size band 1	nr	0	0	0	0	311	311.000	0	0	2	11	298	311.000	0	0	1	15	295	311.000
STWs in size band 2	nr	0	0	1	0	62	63.000	0	0	10	29	24	63.000	0	1	12	28	22	63.000
STWs in size band 3	nr	0	4	0	5	73	82.000	0	2	22	52	7	83.000	0	1	28	43	11	83.000
STWs in size band 4	nr	0	5	3	2	63	73.000	0	5	17	40	11	73.000	0	6	24	26	17	73.000
STWs in size band 5	nr	0	4	3	5	31	43.000	0	4	15	20	3	42.000	0	6	23	6	7	42.000
STWs above size band 5	nr	0	0	1	0	34	35.000	0	1	13	17	4	35.000	1	10	16	4	4	35.000
Total number of works	nr	0	13.000	8.000	12.000	574.000	607.000	0.000	12.000	79.000	169.000	347.000	607.000	1.000	24.000	104.000	122.000	356.000	607.000

**7D.1-6:** The loads within Lines 7D 1-6 have shown a slight decrease across all the bands ranging from -0.72% to -4.03% change compared to 2019/2020. This change in load is due to a combination of reduction in Trade Effluent loads throughout the reporting period due to a reduction in demand from the pandemic, and also a change to the calculated resident population which now accounts for demolitions that were not previously counted.

**7D.7:** Overall, there has been a decrease of 3.38% in the total load as reported in Line 7D.7 when compared to 2019/2020. This change in load is due to a combination of reduction in Trade Effluent loads throughout the reporting period due to a reduction in demand from the pandemic, and also a change to the calculated resident population which now accounts for demolitions that were not previously counted.

**7D.8:** This measure has decreased by 9.67% for 2020/2021 when compared to 2019/2020. The reduction was anticipated and is linked to trade shutdowns throughout the year because of the COVID-19 pandemic.

**7D.9:** There has been a one site reduction from 2019/2020. The site that has been removed is Burton Agnes, where flows have been diverted to an existing site at Burton Agnes South.

**7D.10-14:** No change in bands 2-5+ when compared to 2019/2020.

**7D.15:** The overall number of Sewerage Treatment Works being reported for 2020/2021 is one less than in 2019/2020. The site that has been removed is Burton Agnes (Band 1), where flows have been diverted to an existing site at Burton Agnes South.

**7D.16:** There has been a 3.61% decrease in population equivalent when comparing 2020/2021 to 2019/2020.

**7D.17:** Leeming Bar was an AMP6 output that initially was claimed in within 2019/2020 reported value. However, there was a challenge with the EA over the completion date and the agreement is that the output should be claimed within 2020/2021 instead. Therefore, this year will report the Leeming Bar PE as the output value for this measure and there will be a request to remove the PE from the APR 2020 reported value. There are no other sites to be reported this year.

**7D.18-25:** Zero output for this measure for 2020/2021 against a zero target for the year.

**Table 7E**

**Wastewater network+ – Energy consumption and other data for the 12 months ended 31st March 2021**

Line description	Units	DPs	Input
<b>Other</b>			
Total sewerage catchment area	km <sup>2</sup>	0	1693
Designated coastal bathing waters	nr	0	19
Number of intermittent discharge sites with event duration monitoring	nr	0	0
Number of monitors for flow monitoring at STWs	nr	0	0
Number of odour related complaints	nr	0	913
<b>Energy consumption</b>			
Energy consumption – sewage collection	MWh	3	332,682.864
Energy consumption – sewage treatment	MWh	3	82,285.912
Energy consumption – wastewater network+	MWh	3	414968.776

**7E.1:** This measure has remained unchanged from 2019/2020 as there has been no maintenance required to the boundary during the year.

**7E.2:** This remains the same compared to 2019/2020 as no coastal bathing waters have been designated or de-designated during the period.

**7E.3 & 4:** Zero output for this measure for 2020/2021 against a zero target for the year.

**7E.5:** This measure saw a reduction of 75.78% for 2020/2021 when compared to 2019/2020. Although it's difficult to demonstrate a direct correlation we believe the significant drop in these types of complaints is due to realisation of the benefits from the odour scheme investment over AMP6. We also experienced an unseasonably cold year, which limits the odour impact at our treatment works.

**7E.6–8:** The total energy consumption for both sewage collection and sewage treatment has remained relatively static, with a 2% increase on the previous year.

In 2020/2021, our electricity has increased by 2.9% from 332 GWh– 342 GWh. Electricity consumption is variable due to multiple parameters such as flow, load, and asset availability. A focus on energy reduction has continued to play an important role at Yorkshire Water. Although this work has not reduced the overall consumption it will have limited the increase within wastewater. Electricity within the sewage treatment price control has increased.

One contributing factor is a new method of assessing the fractional split used in 2020/2021. This uses a new model to estimate consumption based on the quantity of processed sludge each year.

A strong focus has been applied to reduce gas oil consumption within Yorkshire Water. Multiple actions have been completed to reduce gas oil consumption. Although multiple sites can demonstrate an annual reduction, the overall consumption has risen by 2.8% within wastewater. One contributing factor to the increase is asset availability at our thermal hydrolysis plant. A reduction in generation meant less heat was captured, this resulted in more gas oil being used for steam production. Ambient temperatures also heavily influence the amount of gas oil that is consumed for heating.

A strong reduction in transport consumption has been seen in 2020/2021. This is partly due to the impact of COVID-19, evidenced below for company cars and travel by our partner companies.

Further reductions have been made from improved asset availability and allowing most of the sludge to be treated internally. This reduces the need for external tankers taking it off-site.

The conversion from Kerosene heating to electric heating resulted in zero kerosene being used 2020/2021.

#### Key

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

# 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:

**Table 8A:** Bioresources sludge data

**Table 8B:** Bioresources operating expenditure analysis

**Table 8C:** Bioresources energy and liquors analysis

**Table 8D:** Bioresources sludge treatment and disposal data

**Table 8A****Bioresources sludge data for the 12 months ended 31st March 2021**

Line description	Units	DPs	Total
Total sewage sludge produced, treated by incumbents	ttds/year	1	147.3
Total sewage sludge produced, treated by 3rd party sludge service provider	ttds/year	1	0.2
Total sewage sludge produced	ttds/year	1	147.5
Total sewage sludge produced from non-appointed liquid waste treatment	ttds/year	1	6.0
Percentage of sludge produced and treated at a site of STW and STC co-location	%	2	65.66
Total sewage sludge disposed by incumbents	ttds/year	1	77.1
Total sewage sludge disposed by 3rd party sludge service provider	ttds/year	1	0.2
Total sewage sludge disposed	ttds/year	1	77.3
Total measure of intersiting 'work' done by pipeline	ttds*km/year	0	2
Total measure of intersiting 'work' done by tanker	ttds*km/year	0	878
Total measure of intersiting 'work' done by truck	ttds*km/year	0	1602
Total measure of intersiting 'work' done (all forms of transportation)	ttds*km/year	0	2482
Total measure of intersiting 'work' done by tanker (by volume transported)	m <sup>3</sup> *km/yr	0	27866810
Total measure of 'work' done in sludge disposal operations by pipeline	ttds*km/year	0	0
Total measure of 'work' done in sludge disposal operations by tanker	ttds*km/year	0	0
Total measure of 'work' done in sludge disposal operations by truck	ttds*km/year	0	3227
Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttds*km/year	0	3227
Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	m <sup>3</sup> *km/yr	0	0
Chemical P sludge as % of sludge produced at STWs	%	2	4.25

**8A.1-3:** Sludge production has typically grown by 0.6% over the last four years. Although we have seen a reduction of 1% compared to last year. This could be COVID-19 related but other factors like weather (rainfall and temperature), and operation of our sewage treatment works also affect production. The process for measuring sludge production are well developed using telemetry and instrumentation. Our data quality is largely driven by instrumentation calibration and maintenance, and in the case of raw cake production (sent to third parties for treatment) cake dry-solids sampling. We believe we have instruments at all the required locations and these instruments are maintained according to Yorkshire Water standards. Next year, we will have commissioned additional digestion capacity at Huddersfield, and this should stop the need for third party treatment of raw cake.

**8A.4:** This measure is made up of three elements:

- Tankered Trade Effluent (General- from Domestic and Trade imports)
- Tankered Trade Effluent (Nufarm)
- Trade via 'Private pipe' Syngenta

Although it's not been directly reported, the data for the Nufarm and Syngenta has been consistent for the last five years. However, the volumes for tankered trade effluent have increased steadily over the last four years as we have launched an initiative to grow this area of the business.

As expected, increased volumes of imports have a direct impact on the volumes of sludge produced.

**Key**

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



The data shows a slight increase on 2019/2020 reported value. The volumes of tankered trade imported waste have increased above our 10% annual target, however the volumes of domestic tankered waste has decreased by a similar volume. This has been partly attributed to the impact of COVID-19. COVID-19 also impacted the level of sampling of domestic tankered effluents; because of this we used last year's sample data to extrapolate the secondary sludge production for this area of the data as we felt the level of sampling received did not give a true representation of the data.

This results in a smaller overall increase in sludge production than in previous years.

**8A.5:** 2020/2021 saw a change of definition for this measure. Previous sites where sludge was thickened and/or dewatered to >10%DS were included in the definition. This meant our raw dewatering sites were co-located under this definition. Under the new definition they are no longer co-located, and our reported number has reduced.

This year 65.66% of our total sludge produced came from co-located sites where previous years this has been 77.9% (2020), 81.6% (2019) and 81.4% (2018), so a value with raw dewatering sites removed was expected to be lower.

COVID-19 may have affected production from both trade sludge production (slowdown in industry) as well as seasonal population movements.

**8A.6:** This year, we have reported an increase in disposal by incumbents, due to the Dewsbury (Mitchell Laithes WwTW) Anaerobic Digestion (AD) plant being refurbished and Biosolids Assurance Scheme (BAS) certified and the recommencement of recycling to agriculture.

**8A.7:** Our reporting in 2020/2021 has been affected by the cessation of use of third party disposal routes due to the increased in-house digestion capacity, mainly at our Dewsbury AD plant but also at other sites. 0.2 ttds/year of sewage sludge disposed.

**8A.8:** A slight increase in total amount of sludge we have disposed of this year has been due to the commencement of recycling legacy sewage sludge conditioned with source segregated and sanitised green waste (known as green waste TCSS) to Land Reclamation.

**8A.9:** For 2020/2021, we have included the sludge piped into upper Brighouse from lower Brighouse where it is currently dewatered which is new for this year. The work done was 2 ttds.km/yr.

**8A.10 & 13:** For 2020/2021 there were 42,837 recorded journeys through loggers in 2020/2021 compared with 39,252 in 2019/2020. This is an increase of 3,585 extra journeys recorded through loggers in 2020/2021, compared with the previous year (9% increase).

**8A.11:** Truck work done has seen a reduction of 7% over the previous year. This is a reduction of 124 ttds/km/year.

Most of the movements in 2020/2021 were within the business with only 140 ttds.km/yr of cake sent to third parties for treatment, compared with 235 ttds.km/yr in 2019/2020.

All cake movements are recorded by third parties, the volumes are weighed, and the dry solids are derived from a limited baked sample set.

**8A.12:** This is a calculation of 8A.9, 8A.10 and 8A.11. All the totals used in these calculations are based on assumed Google distance routes.

**8A.14:** Zero, no change from the 2019/2020 reported value.

**8A.15:** Zero, as recycling to the small turf outlet has ceased. It has become uneconomical to maintain the holding tank facility at Naburn STF.

**8A.16:** A reduction in this value for 2020/2021 has been due to work done by truck, due to closer outlets, an increased local agriculture market for Knostrop digested cake. Previous years included greater amounts of material recycled to remote land reclamations.

**8A.17:** The reduction in all work done has been due to closer outlets and an increased local agricultural market for Knostrop cake. It is also the result of both an overall reduction in recycling by third party outlets and land reclamation.

**8A.18:** Zero, as recycling to the small turf outlet has ceased. It has become uneconomical to maintain the holding tank facility at Naburn STF.

**8A.19:** 4.25% of our total sludge produced came from our wastewater treatment works which use chemical dosing for phosphate removal. This is an increase from the previous year's 3.17%. Currently 34 sites are being chemically dosed with 17 having a full year effect this year with an additional site Sheriff Hutton commissioned in February 2021. Sludge production is affected by different factors including rainfall, temperature and sewage treatment operation etc which have contributed to a net increase of 3.17% of chemical P sludge this year.

**Table 8B****Bioresources operating expenditure analysis for the 12 months ended 31st March 2021**

Line description	Units	DPs	Pipeline	Tanker	Truck	Total
<b>Sludge transport method</b>						
Power	£m	3	0.000	0.001	0.000	0.001
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000
Discharge consents	£m	3	0.000	0.000	0.000	0.000
Bulk discharge	£m	3	0.000	0.000	0.000	0.000
<b>Other operating expenditure</b>						
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000
Other operating expenditure excluding renewals – direct	£m	3	0.000	6.193	0.000	6.193
Other operating expenditure excluding renewals – indirect	£m	3	0.000	0.306	0.000	0.306
Total functional expenditure	£m	3	0.000	6.500	0.000	6.500
Local authority and Cumulo rates	£m	3	0.000	0.002	0.000	0.002
Total operating expenditure (excluding 3rd party)	£m	3	0.000	6.502	0.000	6.502

**Key**

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**Table 8B – Continued****Bioresources operating expenditure analysis for the 12 months ended 31st March 2021**

Line description	Units	DPs	Untreated Sludge	Raw Sludge liming	Conventional AD	Incineration of raw sludge	Incineration of digested Sludge	Photo-conditioning/ composting	Advanced Anaerobic Digestion	Other	Total
<b>Sludge treatment type</b>											
Power	£m	3	0.000	0.030	-2.107	0.000	0.000	0.000	-0.124	0.000	-2.201
Income treated as negative expenditure	£m	3	0.000	0.000	-1.102	0.000	0.000	0.000	-1.191	0.000	-2.293
Discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Other operating expenditure</b>											
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other operating expenditure excluding renewals – direct	£m	3	0.000	0.551	12.718	0.000	0.000	0.000	3.591	0.000	16.860
Other operating expenditure excluding renewals – indirect	£m	3	0.000	0.121	2.802	0.000	0.000	0.000	0.792	0.000	3.715
Total functional expenditure	£m	3	0.000	0.702	12.311	0.000	0.000	0.000	3.068	0.000	16.081
Local authority and Cumulo rates	£m	3	0.000	0.044	1.009	0.000	0.000	0.000	0.285	0.000	1.338
Total operating expenditure (excluding 3rd party)	£m	3	0.000	0.746	13.320	0.000	0.000	0.000	3.353	0.000	17.419

**Key**

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

## Table 8B – Continued

### Bioresources operating expenditure analysis for the 12 months ended 31st March 2021

Line description	Units	DPs	Landfill, raw	Landfill, partly treated	Land restoration/reclamation	Sludge recycled to farmland	Other	Total
<b>Sludge disposal route</b>								
Power	£m	3	0.000	0.000	0.000	0.002	0.000	0.002
Income treated as negative expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Discharge consents	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
<b>Other operating expenditure</b>								
Renewals expensed in year (Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000
Other operating expenditure excluding renewals – direct	£m	3	0.000	0.000	0.373	9.449	0.000	9.822
Other operating expenditure excluding renewals – indirect	£m	3	0.000	0.000	0.053	1.340	0.000	1.393
Total functional expenditure	£m	3	0.000	0.000	0.426	10.791	0.000	11.217
Local authority and Cumulo rates	£m	3	0.000	0.000	0.000	0.004	0.000	0.004
Total operating expenditure (excluding 3rd party)	£m	3	0.000	0.000	0.426	10.795	0.000	11.221

This was a new table introduced earlier in AMP6 and has seen refinements over the last few years. It 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 4.09, with sludge treatment costs directly allocated by site where possible into

the relevant treatment categories (Untreated Sludge, Conventional & Advanced).

The costs by sludge treatment type have moved primarily between incineration to conventional. This is because in 2020/2021 we have had the full year effect of digester treatment for sludge.

### Technical notes

In 2019/2020 this information was presented in Table 4W.

#### Key



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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

Table 8C

Bioresources energy and liquors analysis for the 12 months ended 31st March 2021

			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)
Energy										
Energy consumption - bioresources										5.457
Energy generated by and used in bioresources control			14998	123953	0	138951	1.887	3.327	0.000	5.214
Energy generated by bioresources and used in network+ control			59726	0	0	59726	7.515	0.000	0.000	7.515
Energy generated by bioresources and exported to the grid or third party			489	0	0	489	0.025	0.000	0.000	0.025
Energy generated by bioresources that is unused			0	114889	0	114889				
Energy bought from grid or third party and used in bioresources control			7020	32401	0	39421	0.883	1.195	0.000	2.078
Income from renewable energy subsidies			Value							
Income claimed from Renewable Energy Certificates (ROCs)	£m	3	-2.293							
Income claimed from Renewable Heat Incentives (RHIs)	£m	3	0.000							
Income claimed from [other renewable energy subsidy (1)]	£m	3	0.000							
Income claimed from [other renewable energy subsidy (2)]	£m	3	0.000							
Income claimed from [other renewable energy subsidy (3)]	£m	3	0.000							
Total income claimed from renewable energy subsidies	£m	3	-2.293							
% of total number of renewable energy subsidies due to expire in the next 2 financial years	%	0	0							
This year's value of renewable energy subsidies due to expire in the next 2 financial years	£m	3	0.000							
Bioresources liquors treated by network+										
BOD load of liquor or partially treated liquor returned from bioresources to network+	kg/d	0	26931							
Ammonia load of liquor or partially treated liquor returned from bioresources to network+	kg Amm-N/d	0	5488							
Recharge to Bioresources by network+ for costs of handling and treating bioresources liquors	£m	3	3.409							

## Key



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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

**8C.15:** The biochemical oxygen demand load (settled) of sludge liquor or partially treated liquor returned from bioresources to network was 26,931 kilogram per day (kgBOD5/d).

To calculate this total amount of BOD, measurements are needed of both the liquor volume and its concentration. A monthly sampling programme (introduced March 2021) across all Yorkshire Water bioresources thickening and dewatering sites will provide further data, improving the confidence in the data over time, but this year we have used the data provided from our sampling program.

**8C.16:** The Ammonia load of sludge liquor or partially treated liquor returned from bioresources to network was found to be 5,488kilogram per day (kgNH<sub>4</sub>-N/d).

To calculate this total amount of ammonia, measurements are needed of both the liquor volume and its concentration. A monthly sampling program (introduced March 2021) across all Yorkshire Water bioresources thickening and dewatering sites will provide further data improving the confidence in the data over time, but this year we have used the data provided from our sampling program.

8C is a new table for 2020/2021 and this tables helps the industry ensure there is consistency for energy and liquor treatment in bioresources.

#### Lines 1-6

**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), this market price is considerably lower than the unit price when purchasing from the grid.

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.

#### Line 7

This line is the same as 4K.2 for income treated a negative expenditure for bioresources only.

#### Line 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.

$$C = W \frac{(BOD_i + 4.75A_i)V}{(BOD_n + 4.75A_n)I}$$

Operating costs associated with 2020/2021 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.

**Table 8D****Bioresources sludge treatment and disposal data for the 12 months ended 31st March 2021**

Line description	Units	DPs	By incumbent	By 3rd party sludge service providers
<b>Sludge treatment process</b>				
% Sludge – untreated	%	1	1.7	0.0
% Sludge treatment process – raw sludge liming	%	1	0.1	0.0
% Sludge treatment process – conventional AD	%	1	81.9	0.0
% Sludge treatment process – advanced AD	%	1	16.1	0.1
% Sludge treatment process – incineration of raw sludge	%	1	0.0	0.0
% Sludge treatment process – other (specify)	%	1	0.0	0.0
% Sludge treatment process – Total	%	1	99.8	0.1
<b>(Un-incinerated) sludge disposal and recycling route</b>				
% Sludge disposal route – landfill, raw	%	1	0.0	0.0
% Sludge disposal route – landfill, partly treated	%	1	0.0	0.0
% Sludge disposal route – land restoration/reclamation	%	1	6.2	0.0
% Sludge disposal route – sludge recycled to farmland	%	1	93.5	0.3
% Sludge disposal route – other (specify)	%	1	0.0	0.0
% Sludge disposal route – Total	%	1	99.7	0.3

**8D.1–6:** In AMP6 our 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 incinerates sludge.

This reporting year, we decommissioned our last raw liming (treatment) plant, Selby, part way through the year. This sludge accounted for 0.1% of our sludge. The previous year 1.5% of Yorkshire Water sludge was limed. We expect this to remain at 0% for the rest of the AMP.

98.1% of Yorkshire Water’s sludges was treated via digestion (both advanced and normal). We treated 98.0%, whilst third parties treated 0.1% via anaerobic digestion. This is down from 0.2% last year.

**8D.7:** Please note 8D.7 total should add up to 100% however due to rounding the values to one decimal place on lines 8D1–6 the total adds up to 99.9%. Had infinite decimals been allowed in the 1–6 the total would have added to 100%.

**8D.8 & 9:** This measure is reported as zero, as Yorkshire Water does not dispose sludge to landfill.

**8D.10:** There has been a decrease in the use of land restoration this year, due to increased inhouse digestion capacity, mainly at our Dewsbury AD plant but also at other sites.

**8D.11:** There has been an increase in sludge through this disposal route due to improved internal treatment capacity.

**8D.12:** Zero sludge disposal via another route.

**8D.13:** This year, there has been an increased proportion of sludge treated by Yorkshire Water due to the stopping of third party liming operations, and a reduction in use of land restoration, both due to increased asset availability.

**Key**

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Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report



# 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:

**Table 9A:** Innovation competition

**Table 9A**  
**Innovation competition**

Line description	Units	DPs	Current year
<b>Allowed</b>			
Allowed innovation competition fund price control revenue	£m	3	3.684
<b>Revenue collected for the purposes of the innovation competition</b>			
Price control revenue collected from customers	£m	3	3.684
Non-price control revenue (e.g. royalties)	£m	3	0.000
Revenue collected from customers and transferred into the innovation competition fund	£m	3	3.684

Line description							
	Bids accepted and awarded funding for innovation competition	Forecast expenditure on innovation projects funded through the innovation competition	Actual expenditure on innovation projects funded through the innovation competition in year	Difference between actual and forecast expenditure	Cumulative spend on innovation projects	Allowed future expenditure on innovation projects funded through the innovation competition	Expenditure on innovation projects funded by shareholders
Units DPs	nr 0	£m 3	£m 3	£m 3	£m 3	£m 3	£m 3
Innovation project 1	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 2	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 3	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 4	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 5	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 6	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 7	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 8	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 9	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 10	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 11	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 12	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 13	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 14	0	0.000	0.000	0.000	0.000	0.000	0.000
Innovation project 15	0	0.000	0.000	0.000	0.000	0.000	0.000
Total	0	0.000	0.000	0.000	0.000	0.000	0.000

Administration	Units	DPs	Current year
Administration charge for innovation partner	£m	3	0.000

**Key**

○ Input cell    ● Calculation cell    ● Copy cell

Please refer to RAG 4.09 – Guideline for the table definitions in the annual performance report

# Statement on innovation competition

**The Innovation Fund was set-up by Ofwat 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 funds to winning bidders in competitions held by Ofwat and their partners Nesta. Due to complexities in setting up the fund and bid process from scratch, its launch was delayed, no funding rounds were completed in 2020/2021 so a nil return is presented within Table 1C. The first funding round was completed in June 2021 and £2m was distributed to eleven projects (the maximum allocation per project is £250k). Yorkshire Water led two bids, neither of which was successful, but did support two others which were. The second round of funding will complete in October 2021, which will be a £40m allocation for bids valued between £1m and £10m. Yorkshire Water is leading a single high value, high quality bid. Our plan is to focus on submitting a small number of high qualities, high value bids which align to established business risks or opportunities that will be based upon our mature Innovation strategy and roadmaps.

In terms of reporting for the 2021/2022 APR, we are prioritising the introduction of a systems-based process to formalise appropriate levels of governance and control around the fund, which will be applied to bid sign-off, transfers of cash in and out of the business, and to meet the timescales for cash transfers.

# 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 (March 2021), 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 within the Strategic Report within the Yorkshire Water Annual Report and Financial Statements (ARFS);
- Performance against the CMA redetermination, as detailed in Section 3 and Section 4 of Yorkshire Water's Annual Performance Report (APR);
- 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 our securitised financing arrangements;
- The company's business plan for the remaining period within AMP7; and
- The ongoing impact of the COVID-19 pandemic including the likely adverse impact on the wider economy.

Detail of the going concern review is shown within note 1 of the Yorkshire Water ARFS for the year ended 31 March 2021. In addition, the company has completed a long-term viability assessment for the nine years to 31 March 2030, details of which are shown in the ARFS for the year ended 31 March 2021. The long-term viability statement has been prepared in line with 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 2021, Yorkshire Water had two Issuer Credit Ratings that were Investment Grade Ratings in accordance with the definitions set out in the Instrument of Appointment.

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 2021 as detailed in note 24 to the Yorkshire Water ARFS.

Amounts owed to group and subsidiary companies are detailed in notes 15, 16 and 17 of the Yorkshire Water 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;
- Social Value Committee;
- Health and Safety 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 wellbeing of our colleagues;
- Attracting great people and maintaining the skills we need; and
- Diversity;

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 Other Disclosures section of the Directors' Report in 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. The minutes of this forum are reviewed at each Board meeting. Regular colleague engagement surveys are undertaken, with the resulting colleague engagement score forms 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 Corporate Governance Report in 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 effectiveness 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.

Three lines of assurance work together to ensure that there is adequate and proportionate coverage across the whole control environment, including all corporate risks, 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 Audit and Risk Committee.

The company's formal 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. The long-term viability statement as at 31 March 2021 covers a nine-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

In March 2020, the company launched its new purpose, ambition, and values. The process to get here, included working groups with representation from across our business, involving a broad range of colleagues, stakeholders, and customers, with the Board participating as a further working group. Proposals were reviewed by the Board throughout the process and approved in January 2020 to be launched in March 2020. During 2020/2021 the Board has focussed on embedding the new purpose, vision, and behaviours in the culture of the business, through regular feedback from the Colleague Engagement Forum and the Yorkshire Water Voice survey, along with feedback from suppliers and customers.



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 Directors’ Report in the ARFS further describes the company’s purpose, strategy, values, and desired behaviours.

As noted last year, in 2019/2020, the company recruited a Chief Information and Technology Officer who provides insight and updates to the Board on all technology matters. This role was specifically identified through a board skills review. In June 2020, the company appointed a new Chief Financial Officer following a recruitment process undertaken by independent consultants during the preceding financial year. In June 2021, a new Director of Capital Delivery was appointed to focus on the creation and delivery of key operational assets to deliver our AMP7 programme.

In 2021, a comprehensive recruitment process was undertaken to seek a new Chair of the Yorkshire Water Board, given that the current company Chair will cease to be independent in 2022 under the UK Corporate Governance Code as he will have been with Yorkshire Water for nine years. The recruitment process has resulted in the appointment of a new independent non-executive director on 1 July 2021 who will step up to become the Chair of the Board later in 2021 upon the retirement of our current 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.

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. 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 “Our Contribution to Yorkshire” and reviews the period from 2015 to 2020. This is our second 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.

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 Board 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 in the ARFS.

Transactions with associated companies and checks that these contracts comply with licence requirements are detailed within the Accounting Separation Methodology Statement, which is published on the Yorkshire Water reports webpage, and within the transfer pricing disclosures in [Section 7](#) of the 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 [Section 7](#) of 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.

## 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 significant risks facing the business at the March 2021 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 7 June 2021, and updated information presented on 7 July 2021 prior to final Board approval of the ARFS. Detail of the going concern review is shown within the note 1 of the ARFS.

Climate change is a key ongoing risk. In the course of this financial year, we have had a dry summer bringing higher water distribution and abstraction costs, a harsh winter leading to increased costs of leakage detection and mains repair, and in 2021 storms Christoph and Darcy, which brought torrential rain and flooding. This was at a time when we were also recovering from the widespread flooding in the Don Valley in November 2019. Our ongoing focus on our work in this area is detailed in the Disclosing our climate change risks and strategy section of the ARFS.

As detailed above, the ongoing COVID-19 pandemic on the business and wider economy was identified as a material challenge and uncertainty for the 12-month period covered by the regulatory ring-fencing certificate. 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 2020-21.

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 7 July 2021, the Board approved this Ring-Fencing Certificate.



### Liz Barber

Chief Executive

Signed for and on behalf of the Board of Directors of Yorkshire Water Services Ltd

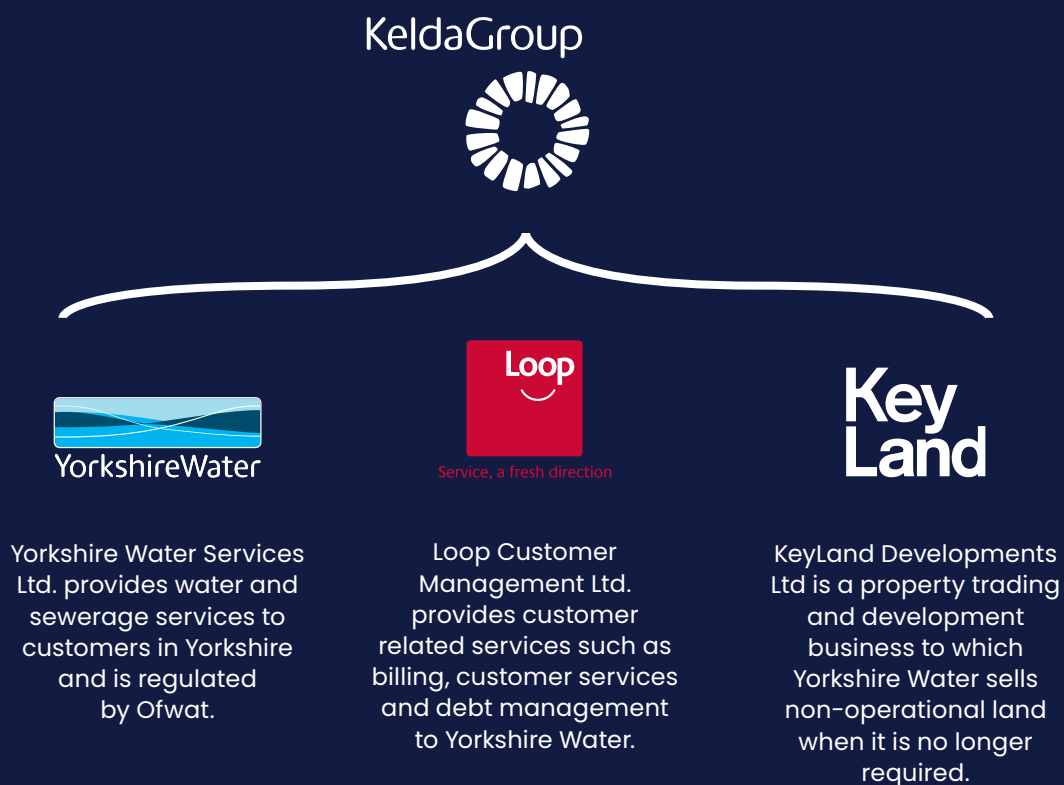
# 6. Board, leadership, transparency and governance

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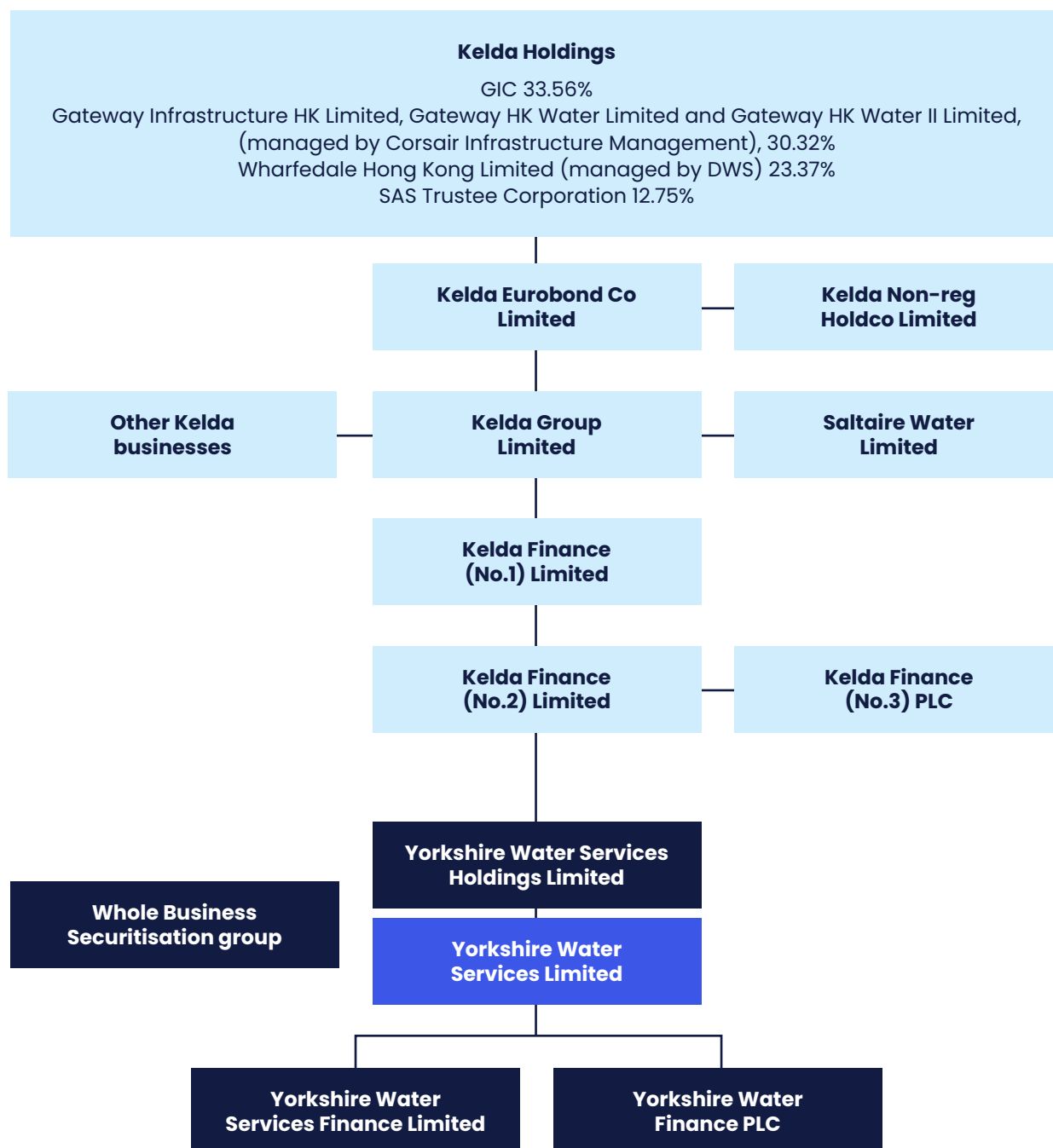
# Our company structure

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:**





## Whole Business Securitisation (WBS)

**Yorkshire Water has had a well-established financing structure, known as a WBS, since 2009. The WBS enhances the creditworthiness of Yorkshire Water by setting strict rules that demonstrate to lenders the company is a safe and reliable business in which to invest. Lenders are therefore more prepared to lend to Yorkshire Water at lower borrowing rates which is in the long-term interest of customers.**

This WBS works by placing a protective ring-fence around Yorkshire Water's business which includes the way it operates, the way it trades with other group companies outside the WBS and the way it finances itself. The protections include limits on borrowings, dividends, and the ability to lend money to other Kelda companies. The protections also require profits to more than cover the amount of interest that Yorkshire Water pays.

Yorkshire Water Finance plc is the principal financing vehicle for the WBS group. Yorkshire Water Services Finance Limited remains part of the WBS as a legacy finance company for debt issued prior to the introduction of the WBS. Both companies are incorporated in England and Wales and are wholly and exclusively resident for tax in the UK.



# Our Board of Directors

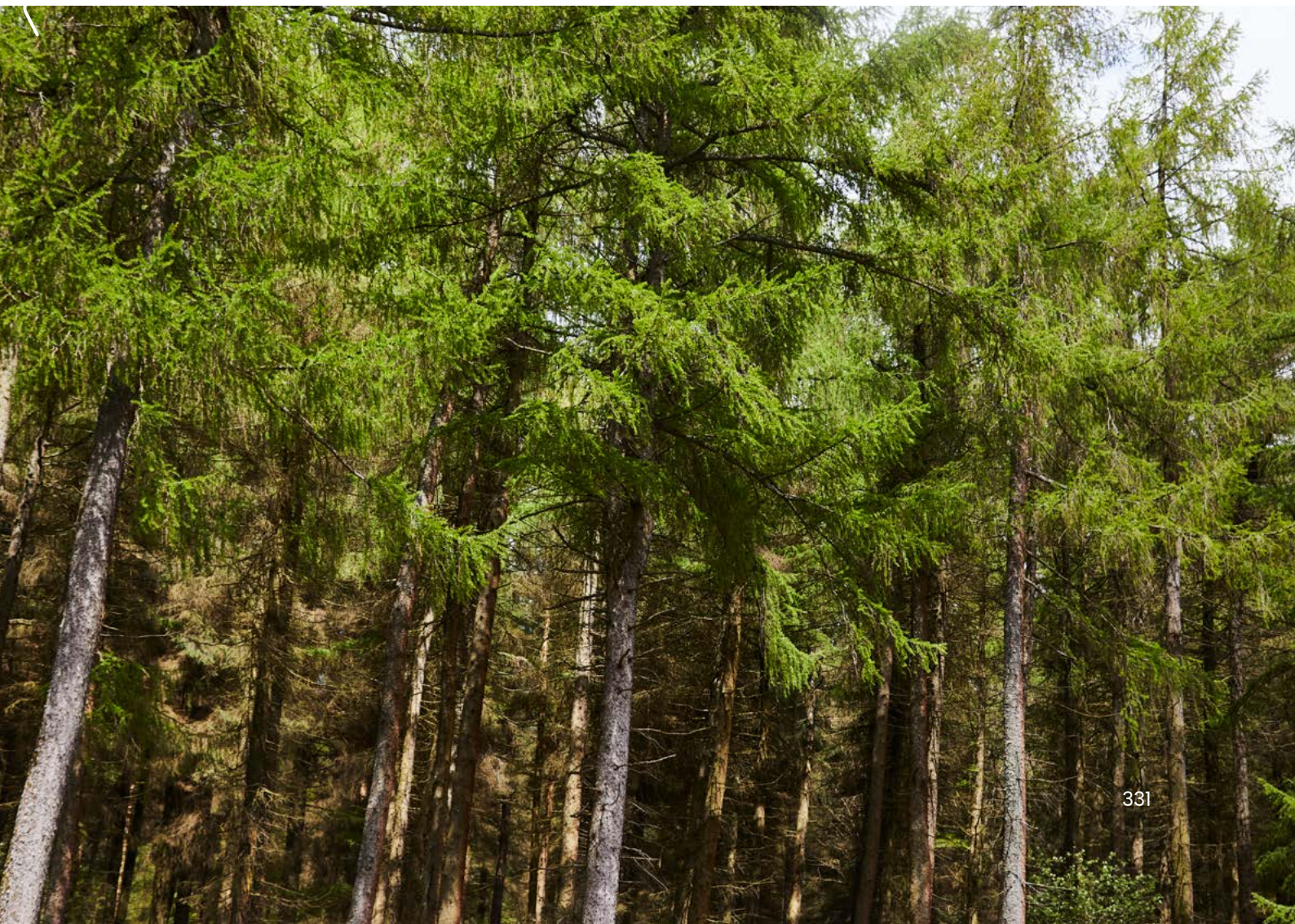
**The primary focus for the Board is to lead the development and delivery of the company's purpose, strategy and values needed to meet the service and performance expectations of our customers and stakeholders.**

An executive director is a member of the Board who also has management responsibilities within the company.

A non-executive director is a Board member who contributes their wider skills and experience to Board decision-making.

They 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.





## The composition of the Board at 31 March 2021 was as follows.



**Independent Non-Executive Chairman**  
Anthony Rabin

### Independent Non-Executive Directors



Ray O'Toole



Dame Julia Unwin



Andrew Wyllie CBE



Andrew Merrick

### Executive Directors



Liz Barber,  
Chief Executive



Nevil Muncaster,  
Chief Strategy  
and Regulation  
Officer



Chris Johns,  
Chief Financial  
Officer

### Investor Non-Executive Directors



Scott Auty



Andrew Dench



Mike Osborne

### Committee Key:

- AR** Audit and Risk Committee
- N** Nomination Committee
- PR** People and Remuneration Committee
- SV** Social Value Committee
- HS** Health and Safety Committee



### Anthony Rabin, Non-Executive Chairman

**Appointed:** Anthony joined the Board as an Independent Non-Executive Director in August 2013 and became our Non-Executive Chairman on 9 September 2016.

**Skills and experience:** Anthony was with Balfour Beatty plc, the international infrastructure group, for 17 years until June 2012, including six years as the Chief Financial Officer (CFO) and four years as Deputy Chief Executive. He has also held several previous executive roles within Coopers & Lybrand (Partner, Structured Finance Group) and Morgan Grenfell & Co (Senior Assistant Director). Anthony is a Fellow of the Institute of Chartered Accountants in England and Wales, an English barrister, and an Honorary Research Fellow at the University of Hull.

**Other roles:** Anthony is the Non-Executive chairman of Kelda Holdings Limited.

#### Committee Membership:



Chairs the Nomination 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 CFO in November 2010, stepping up to become the Chief Executive Officer (CEO) in September 2019.

**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 is the CEO for Kelda Holdings Limited. 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. Liz was a Non-Executive Director and Chair of the Audit Committee for KCOM Group PLC from 2015 to 2019.

#### 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, M&A, utilities, and the natural resources sector.

**Other roles:** Andrew is a Non-Executive director of Kelda Holdings Limited. He is also a Non-Executive Director on a number of 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:



### 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 had 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 and a Trustee of The Nell Bank Charitable Trust.

#### Committee Membership:



Chairs the Audit and Risk Committee



### Nevil Muncaster, Chief Strategy & Regulation Officer

**Appointed:** Nevil joined the Board as Director of Asset Delivery in May 2013, becoming the Director of Asset Management in 2014 and then the Chief Strategy & Regulation Officer in 2019.

**Skills and experience:** Nevil is a Fellow of the Chartered Institution of Water and Environmental Management and joined the company from Veolia Water where he worked for 19 years and held the roles of Managing Director of Veolia Water South East (formerly Folkstone and Dover Water) and Managing Director of Veolia Water East (formerly Tending Hundred Water).

**Other roles:** Nevil is the Chair of KeyLand Developments Limited, a Board member of the Living with Water Partnership in Hull, a member of the Green Economy Panel of West Yorkshire Combined Authority and a member of the Sustainable Development Board for Bradford Council.

#### 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 much of his career in the transport sector, including as Group Chief Operating Officer and UK Chief Executive for National Express plc for 10 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 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 Chairman of Stagecoach Group plc.

#### Committee Membership:



Chairs the People and Remuneration Committee



### Mike Osborne, Non-Executive Director

**Appointed:** Mike joined the Board as a Non-Executive Director in September 2017.

**Skills and experience:** Mike is a Principal at Corsair Infrastructure Partners, a business unit of Corsair Capital. Mike has 18 years of experience in infrastructure finance at Ernst & Young, Citi and Corsair.

**Other roles:** Mike is also a Director of Itinere Infraestructuras, S.A., a toll road operator in Spain.

#### Committee Membership:





### **Dame Julia Unwin,** Independent Non-Executive Director

**Appointed:** Julia was appointed to 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 extensive experience of regulatory environments. She was the Chief Executive of the Joseph Rowntree Foundation for 10 years from 2007 until the end of 2016 and was a Council member of the University of York until December 2018. She has also previously served at a very senior level at the Housing Corporation, the Charity Commission and she has chaired 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 at both Mears Group PLC and The Financial Reporting Council (FRC), and is also the Chair of the governing body for York St John 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 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:**



Chairs the Health and Safety Committee

#### **Post year-end appointment**

On 15 June 2021, we were delighted to announce the appointment of Vanda Murray to our Board as an Independent Non-Executive Director. Vanda will become our Non-Executive Chair later this year upon the retirement of Anthony Rabin from our Board. Vanda is Non-Executive Director and Chair of Yorkshire-based Marshalls plc and is the Senior Independent Director and Chair of the Remuneration Committee at Bunzl plc. She is also a Non-Executive Director at Manchester Airports Group, where she chairs the Remuneration and Corporate and Social Responsibility Committees. Vanda brings with her extensive experience of business leadership in a number of different sectors and was an outstanding candidate following a very thorough recruitment process.



# 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. There is no obligation on the company to comply with the UK Corporate Governance Code, however the Board chooses to report its compliance with the 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 published in July 2018 throughout the year ended 31 March 2021, with the exception of the following provisions:**

- **Provision 11** – this principle requires that at least half the Board, excluding the Chairman, 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 annual general meeting. As a private limited company, we do not hold an annual general meeting and therefore this provision does not apply.
- **Provision 24** – this provision requires an Audit Committee to be set-up consisting of Independent Non-Executive Directors. Our Audit and Risk Committee has a majority of independent non-executive directors on it but also has two Investor Directors, who we believe provide useful challenge and insight to the Committee.

**This section makes several references to our Annual Report and Financial Statements which can be found on here on our reports webpage:**

- **Provision 32** – this provision requires the People and Remuneration Committee to consist of Independent Non-Executive Directors. Our People and Remuneration Committee has a majority of Independent Non-Executive Directors but also has two 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.

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

In March 2020, we launched our new purpose, ambition, and values, having completed a significant piece of work with our colleagues, customers, directors, shareholders, and other stakeholders to create the revised versions. We covered this in detail in our report last year. The Board was heavily involved throughout this process and gave approval to the final version prior to its launch. Our purpose is 'to play water's role in making Yorkshire a great place to live, to work and to visit' and 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**



## Embedding our purpose, ambition, and behaviours

In the year under review the focus of the Board has been on embedding the new purpose, vision, and behaviours in the culture of the business. The Board gains insight on the business culture through the feedback it receives from the Colleague Engagement Forum, and through the Yorkshire Water Voice survey results. These are fed back in detail, and include a summary of the comments made by colleagues through the survey. The Colleague Engagement Forum has met six times during the year and at least two non-executive Board members have attended each meeting. The minutes from each meeting are circulated as part of the Board papers and there is a standing agenda item at each Board meeting to consider the feedback received.

The Board has also heard directly from one of our key suppliers, who attended a Health and Safety Committee meeting to discuss how it feels

partnering with Yorkshire Water and the culture we display to our partners.

There has been clear evidence in the year that the new purpose and vision are becoming embedded across our business.

Our vision of 'putting people at the heart of everything we do' is often quoted in comments on our intranet and in the Yorkshire Water Voice survey. We are also very proud that during the year we hit the milestone of our colleagues receiving over 1,000 WOW! Award nominations. The WOW! Awards is an employee recognition programme which recognises colleagues for going above and beyond in their roles and demonstrating the desired behaviours in what they do. This is another indicator that the behaviours, vision, and purpose are becoming increasingly embedded across the business.

## Alignment of purpose and strategy

There has been considerable work in the year to ensure that the purpose and strategy of the business are aligned. A number of Thought Leadership sessions have been held, which were attended by Board members and various stakeholders, to consider different aspects of our purpose and how this aligns to our strategy.

These have included climate change, the environment, customer experience and partnerships. Work is ongoing on the long-term strategy of the business and there have been a number of Board sessions held to involve the Board in the development of this. The final updated strategy is due to be signed-off by the Board later in 2021.

**The regulated company has an effective Board with full responsibility for all aspects of the regulated company's business for the long-term.**



## Handling conflicts of interest

Each of our directors is subject to the legal obligations in relation to conflicts of interest that are set out in company law. Our Board members are all experienced directors, and all receive regular reminders of their statutory obligations. Our Board has investor representatives on it, as well as executives and independent non-executive directors.

We place great importance on ensuring that we maintain the right balance in the Boardroom, so that the effectiveness of the Board is not undermined by conflicted interests. Our investor directors are very conscious of their obligations as directors and that their duty

is to act as a director of the company rather than a shareholder representative. This means they make decisions, having regard to other stakeholders, which they believe will promote the success of the company for the benefit of both current and future members.

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.

## Matters reserved for the holding company

We have schedules of Matters Reserved for the Board for both Yorkshire Water and its ultimate parent company, Kelda Holdings Limited. During the year both of these schedules have been revised to reflect recent developments in corporate governance and to ensure that these are completely aligned with each other.

Matters relating to Yorkshire Water are always discussed first at the Board of Yorkshire Water. The presence of investor directors on the Board means that all stakeholder considerations, including those of the shareholders, are taken into account at the Yorkshire Water level prior to the decision being made. Matters are then also considered by the Kelda Holdings Limited Board in accordance with the Reserved Matters and our Shareholder Agreement, which sets out the matters that require investor consent.

**During the year there were just six decisions taken by the Board of Kelda Holdings Limited in relation to Yorkshire Water matters. These were:**

- The changes to executive remuneration set out in the Remuneration Report in 2020, which is a matter requiring investor consent;
- The reappointment of the external auditors, which is a matter for the Kelda Holdings Board as the appointment is made at a group level;
- The reappointments of Ray O'Toole and Julia Unwin as independent non-executive directors of Yorkshire Water, as the appointment or reappointment of directors is a matter for investor consent; and
- The approval of policies in relation to tax strategy and the anti-facilitation of tax evasion, which are groupwide policies requiring Board approval.

The limited number of Yorkshire Water matters considered by the Kelda Holdings Limited Board clearly shows that the Board of Yorkshire Water operates effectively with full responsibility for all aspects of the business of the regulated company, to the extent permitted under company law.

## Ensuring long-term focus

The Board makes all decisions with a view to the longer term. 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 then aligned to this longer-term strategy when it is drawn up and reviewed by the Board. Each year 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.

## The Board's leadership and approach to transparency and governance engenders trust in the regulated company and ensures accountability for their actions.



### Our approach to transparency and governance

During the year we launched our Customer Promise which was developed through consultation with different customer groups. Part of our Promise is to 'lead by example' and this was in response to our customers needing to know that we are an ethically run company that they can trust.

We recognise our position as a regional monopoly and we know that this makes it even more important for our customers to be 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. During the year we have rewritten our Code of Ethics and this will be issued across our business in the summer of 2021. 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. A number of Board members were involved in the development and review process for the new Code and it received the approval of the Board in May 2021.

Our Social Value Committee focuses on the social purpose and public accountability of the organisation, our role as an anchor institution in Yorkshire and the key role we play in the health, wellbeing, and prosperity of the region. This has been particularly important over the last year with the impact of COVID-19 across Yorkshire. More information on how the Board sought to help our customers and communities impacted by COVID-19 is in the Strategic Report. 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 the Directors' Report found in the Annual Report and Financial Statements (ARFS) sets 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 statement on executive pay and performance in this section. Over 60% of the measures are customer-related to ensure that our executive director and senior colleague goals are aligned with those of our customers. There is, therefore, a clear correlation between delivering for customers and any variable payments made, which are transparently set out in our statement on executive pay and performance each year.

## 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 £45.2m in dividends. A breakdown of this amount has been included in Section 7. Transactions with associates and the non-appointed business. There were no dividends paid in the year for distribution to the ultimate shareholders.

**Boards and their committees are competent, well run, and have sufficient independent membership, ensuring they can make high quality decisions that address diverse customer and stakeholder needs.**



## Assurance of information

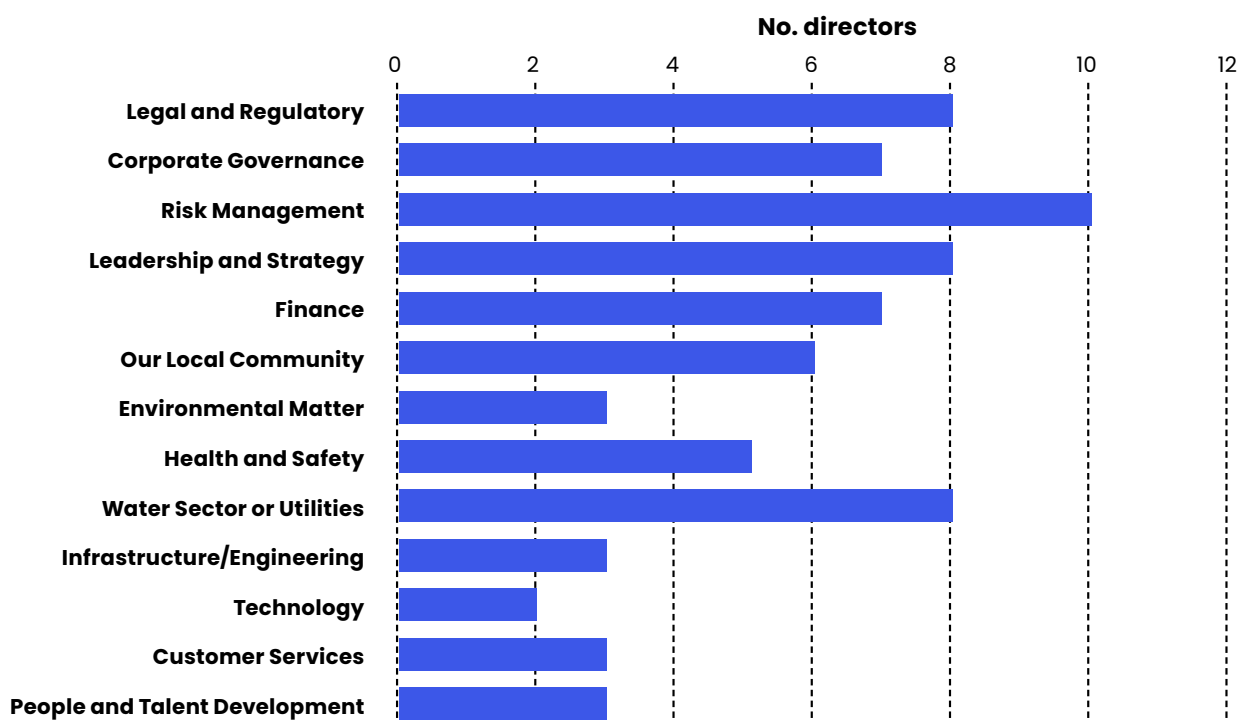
We seek to assure information through independent means wherever we can, and we detail in this report where information has been independently verified and the three-line assurance process that we have in place to assure the information that we provide to make it as trustworthy as possible.

In the year under review we have continued to work with independent consultants to seek to continually improve the effectiveness of the Board. This year in particular, we have focused on the lessons to be learned from our implementation of the SAP Enterprise Resource Planning system in 2019 and how the Board can be more effective in its oversight of major transformation projects in the future.

## Ensuring an effective Board

We undertake an annual Board evaluation to consider the effectiveness of our Board. In 2021 this was an internal evaluation, led by our Company Secretary. The results of this and our goals for the coming year are described in our Strategic Report. Part of the evaluation was designed to consider how effective the Board has been in considering stakeholders in all it has done over the past year. Further information on how the Board fulfils its duties in relation to stakeholders, including colleagues, customers, and communities, can be found in our Annual Report and Financial Statement (ARFS). In line with the requirements of the UK Corporate Governance Code, our evaluation in 2022 will be externally facilitated.

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 should operate 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. During the year, along with a number of workshops on specific topics mentioned elsewhere in this report, the Board has received specific training on environmental law and competition law and Board members have completed the IOSH 'Safety for Executives and Directors' online training course, to enhance their skills and expertise in these areas.



We maintain a Board skills matrix which looks at the skills and experience of each of our Board members. This is used to identify any potential gaps in the expertise and experience that we have on the Board and helps us to ensure we maintain a balance of the skills and experience that we need now and may need in the future. We use the Board skills matrix when reviewing the Board on an ongoing basis but also specifically when we undertake recruitment, which we have done in the year under review to identify a successor for our chair, Anthony Rabin, who will retire later in 2021 due to drawing near to the nine-year limit set by the UK Corporate Governance Code for independence.

The matrix shows that the current Board is least skilled in technology and digital matters. As noted last year, we now have a Chief Information and Technology Officer in the Yorkshire Water Leadership Team (YWLT) who provides regular updates to the Board on technology matters and is readily available to provide insight and expertise as and when required.

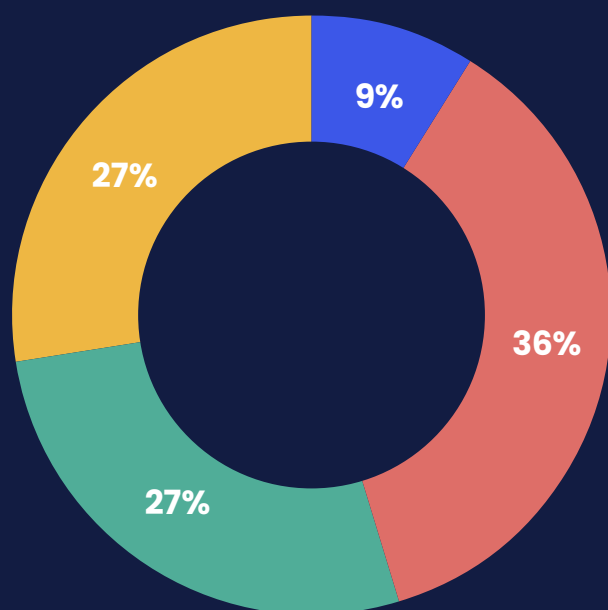
We also review the diversity of the Board on a regular basis and are aware that the Board does not currently reflect the diversity of the community that we serve from both a gender and ethnicity perspective. We aim to comply with the recommendations of the latest update from the Parker Review in February 2020 and the final report from the Hampton-Alexander Review in February 2021 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 in the 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 Social Value and Health and Safety 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. During the year we have undertaken a detailed review of the remit of each of our Board Committees and refreshed the Terms of Reference to seek to optimise the effectiveness of each of the committees.

## **The Wates Corporate Governance Principles for Large Private Companies**

The above 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 the way the Board operates in each of the six areas identified is contained in the Directors' Report of the ARFS.

# Leadership



## Our Board composition

As at 31 March 2021, the Board comprises the following:

- Independent Non-Executive Chair
- Independent Non-Executive Directors
- Investor Non-Executive Directors
- Executive Directors

For the period from 1 April 2020 to 31 May 2020 there were just two Executive Directors on the Board, with Chris Johns appointed to the role of Chief Financial Officer on 1 June 2020.

## Board committees

The Board has established and delegated specific responsibilities to Audit and Risk, Nomination, People and Remuneration, Health and Safety and Social 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. The Committee reports can be found in our ARFS.

## Other Director-led Committees

Directors chair and report to the Board on the activities of a number of other matters of significant Importance to the Board. For example, the long established Board Investment Committee and the newly established Competition and Markets Committee.

Each committee has its own Terms of Reference which sets out the role of the committee and the Board is regularly updated on any matters of material significance.

## How the Board operates

The Board had six scheduled Board meetings in the year, with one additional ad-hoc meeting held to approve a major procurement contract. All of the Board, Committee and workshop meetings in the year have been held remotely by video conference due to the restrictions imposed as a result of COVID-19. Usually the scheduled meetings are preceded the evening before by an informal meeting over dinner, allowing more time to debate issues in depth, however this has clearly not been possible in the year under review due to the impact of COVID-19.



In addition, the Board meets for workshops each year to consider specific matters in greater depth. During the year, nine of these workshops were held to consider such topics as updates on the handling of the impact of COVID-19 on colleagues and customers, the Business Plan, the transformation programme, the referral to the Competition and Markets Authority (CMA), health and safety and learnings from the SAP implementation programme.

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 or workshops 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 has been reviewed and updated during the year. This 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.

## Appointment and replacement of directors

The Articles of Association allow the Board to appoint a new director at any time; however, the appointment is also subject to approval by investors who hold 60.6% of the share capital of the ultimate parent company, Kelda Holdings Limited. This is consistent with the practice of a listed company where the shareholders would approve an appointment at the next annual general meeting. As a private limited company, we do not hold an annual general meeting and therefore directors are not subject to annual re-election by the shareholders.

The Articles of Association state that the company may remove a director by ordinary resolution with special notice before the expiration of their period of office. There have been no directors removed from office during the year.

## Independence

The Board reviews the independence of the Independent Non-Executive Directors each year; considering their tenure, relationships and circumstances as well as considering the behaviour of each director at Board meetings and whether or not they contribute to unbiased and independent debate. All of the Independent Non-Executive Directors and the Non-Executive Chairman were independent upon appointment and the Board believes that all remain wholly independent in relation to the criteria set out in Provision 10 of the UK Corporate Governance Code.

## Commitments of the non-executive chairman

Anthony does not currently have any other significant commitments.



## 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.

## Reappointment of the external auditors

Deloitte LLP has advised of its willingness to continue in office and has confirmed its continued independence. Deloitte LLP was appointed as external auditors in 2018, following a robust competitive tender process which resulted in a change of auditor. Following consideration of the relationship with the external auditors, the Audit and Risk Committee has recommended to the Board that Deloitte LLP is reappointed, and it has been resolved to reappoint them. They have provided an independent audit opinion on these accounts which can be found in [Section 4. Pro forma tables](#) of this APR.

## Board evaluation

We reported last year on the Board evaluation that we undertook in 2020 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 2021
An improvement in the presentation of certain Board papers, to provide greater clarity around the key points for Board consideration amongst the wealth of information currently provided.	We are continually working to improve and enhance the quality of papers presented to the Board. During the year our Company Secretary drafted some guidance which was issued to everyone involved in drafting Board papers. This has helped to improve the quality of Board papers and provide greater clarity on the key points for consideration, which has been reflected in the feedback received in our Board evaluation for 2021.
Specific focus by the Board on a number of topics during the year, in relation to the delivery of the new Business Plan, ongoing strategic development and transformational change.	The Board has spent considerable time throughout the year focusing on the topics that were flagged for specific consideration last year. There have been a number of Thought Leadership sessions held, as part of the ongoing strategy development, along with specific Board strategy sessions on people, customers, and technology. There have been regular updates on transformation throughout the year and a number of specific sessions focused on the Business Plan, along with monthly updates on operational and financial performance.
The remit of the Committees to be reviewed to ensure that the Board and the Committees combine in the most optimal way possible to ensure key matters receive an appropriate level of focus at Board level, without unnecessary duplication.	During the year the remit of each of the Committees was reviewed in detail as part of an overall review of corporate governance by our Company Secretary. Revised Terms of Reference for each Committee were brought to the Board in September 2020 to reflect the revised remits. Each Committee remit will continue to be reviewed on an ongoing basis to ensure that the Committees operate as effectively as possible and that there is an appropriate level of focus on key matters across the Committees and the Board itself.

In 2021, we have undertaken another internal evaluation, consisting of one-to-one meetings between the Company Secretary and each Board member. The output from these meetings was collated and presented back to the Board for discussion.

The review concluded that the Board and its Committees were operating effectively and that improvements continued to be made in relation to the quality of Board papers. The review highlighted a good use of time in Board meetings to focus on priority matters and a strong culture of transparency and openness between Board members and the business.

COVID-19 has meant that all Board and Committee meetings in the year have been held remotely and Board members have missed the opportunity to visit our sites and meet with more colleagues beyond the senior leadership team.

**The review highlighted some specific areas for focus 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.
- 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.
- 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.

An action plan has been developed and agreed by the Board and the progress made will be reported in this report for the year ended 31 March 2022. In addition to the annual Board evaluation, the Chairman 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 Chairman and discusses this with him at least annually. In compliance with the requirements of the UK Corporate Governance Code, our Board evaluation for 2022 will be externally facilitated.

## Non-executive director meetings

The Independent Non-Executive Directors and Investor Directors meet with the Chairman, without the other directors present, after every Board meeting to discuss Board 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.

Anthony Rabin, Liz Barber, Scott Auty, Andrew Dench, and Mike Osborne remain mindful that they hold directorships on both the Board and that of Kelda Holdings Limited and that these operate as distinct legal entities.

# Statement on executive pay and performance

## 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 2022 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 2021 has been applied, how we intend to apply the new policy for 2022, 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 Annual General Meeting (AGM). This report 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 2021.

We aim to be completely transparent in relation to remuneration and our remuneration policy is designed to enable us to recruit and retain high calibre executive directors, to reward them fairly and to reflect the priorities and values of the business. We also always consider the pay and employment conditions across the rest of the business and in the communities we serve when we make remuneration-related decisions. The remuneration of our executive directors is weighted towards variable pay to ensure that pay levels are closely aligned to performance, both financial and non-financial. The performance conditions for variable pay include measures relating to customer experience, stability and reliability of service, health and safety, colleague engagement, environmental, 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

Last year we reported on a comprehensive review of our remuneration policy and the changes resulting from that. This year we have reviewed the policy in place and concluded that it remains fit for purpose and will continue to appropriately reward strong performance whilst not rewarding poor performance. Therefore, there are no significant policy changes proposed for the remuneration policy for 2021/2022.

## Board changes

As reported in our Annual Report last year, Chris Johns joined our Board on 1 June 2020 as our CFO. The remuneration paid to Chris during the year is aligned to our remuneration policy on recruitment and the details on this can be found later in the report.

## Performance

This has been a very challenging year across the world as a result of COVID-19, and this has had a significant operational impact at Yorkshire Water with our field teams having to adopt new ways of working to minimise the risk to themselves and members of the public, and our office-based colleagues having to adapt to working from home throughout the year, many whilst also juggling home schooling and childcare. As a committee we were extremely pleased to support the announcement made to our colleagues in April 2020 that Yorkshire Water would not be using the Government furlough scheme during the pandemic and the commitment made to all colleagues that they would receive normal pay throughout the COVID-19 period. This gave our colleagues security and certainty at a challenging time. Alongside the difficulties presented by the pandemic, we have experienced challenging weather during the year, with the cumulative impact of cold and wet weather throughout the winter period being far greater than the 'Beast from the East' experienced in 2018. The leadership team has also been delivering the start of our transformation programme across the business and has spent significant time and effort providing information for the referral of the Price Review to the CMA. All of these factors have been taken into account by the People and Remuneration Committee in our consideration of remuneration throughout the year. Further information on the performance of the business can be found in our Strategic Report of the Annual Report and Financial Statements (ARFS).

## Update to the committee terms of reference

During the year our Company Secretary undertook a governance review which looked at the terms of reference across all of the Board committees. This resulted in the remit of the Committee expanding to cover more elements of human capital than previously and playing a greater role in overseeing performance and development across the business, as well as matters relating to diversity, inclusion, and culture. As a result, the committee took the decision to rename itself the People and Remuneration Committee to reflect the broader remit of the committee in relation to people matters. This ties in closely with our ambition as an organisation to 'put people at the heart of everything we do' and emphasises the importance the Board places on considering things that matter to our colleagues and which make a difference to what Yorkshire Water is like as a place of work.

## Key decisions by the committee in the year

The committee met on six occasions during the financial year and there have been a number of key decisions taken, which are outlined below.

### The appointment of Chris Johns

As noted above, Chris Johns joined the business as our CFO on 1 June 2020. The Committee reviewed the remuneration to be offered to Chris, taking into account the remit of his role and his previous experience, and offered a package fully in line with our remuneration policy, with a base salary of £0.3m and a maximum variable pay award of 150% for the short-term element of the Executive Incentive Plan (EIP), and up to 150% for the long-term element, applied over a five-year period. Further information on the remuneration received by Chris in the year is shown later in this report.

### Salary review for executive directors

The Committee reviewed the pay of the executive directors in March 2021, taking into account a number of factors, including prevailing market and external economic data. When being considered, the pay rise value for the wider workforce had yet to be agreed. Taking all of this into account the decision was taken, in principle, to provisionally award an increase of 1.75% to the executive directors, however this is yet to be applied and is dependent on the outcome of pay negotiations across the rest of the business. When the amount of the pay award is confirmed later in the year, the increase will be backdated to take effect from 1 April 2021 and will be reported in the Remuneration Report in 2022. Liz Barber has chosen to waive her proposed increase for the second year in succession.

### Alignment of pension contributions

The Committee reviewed the company pension contributions payable for executive directors during the year in comparison to those contributed for colleagues across the business. It was noted that the maximum contribution made on behalf of colleagues across the business was 10%, whilst the contributions for executive directors were at 12%. The decision was therefore taken by the Committee to align the contributions paid on behalf of the executive directors with the rest of the business from 1 April 2021, with a corresponding Increase in base pay to net off against the reduction in pension contributions.

### The award and measures for the 2020 EIP

As reported last year, the EIP began in 2020 as a replacement for both the annual bonus scheme and the Long-term Incentive Plan (LTIP). Awards were made under the EIP in April 2020 to the three executive directors, each 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 EIP, setting the threshold, target, and maximum performance levels for each element of the scheme to drive delivery of the desired operational and financial outcomes for the business. The long-term performance measures were also agreed and communicated to participants. These aim to ensure that the position achieved at the end of year one of the scheme is at least maintained for the remaining performance periods.

### Variable pay vesting in 2021

Two variable pay schemes had performance periods ending in 2021; the LTIP which was awarded in 2018 with a three-year performance period and the first year of the EIP awarded in 2020.

The LTIP performance over the three-year period indicated a vesting of 45.3% as at 1 May 2021. This was reviewed in detail by the Committee and the calculations were independently verified by KPMG. It was agreed that this level of vesting should be approved by the Committee and will be paid to participants in July 2021. Liz Barber and Nevil Muncaster are the only executive directors in the LTIP scheme and the amounts they will receive are shown in the Remuneration Policy Report.

The performance in the first year of the EIP indicated vesting of 84.0%. This was discussed at length by the Committee, taking into account the discretionary elements of the scheme and the wider context of the year under review. It was agreed that the vesting reflected the targets that had been met and that there would be no discretionary reduction of the amount vested, given the extremely challenging year that had been experienced and the strong performance demonstrated despite the difficulties faced.

Payments in relation to the EIP will be paid to all executive directors in July 2021. Further information on the amounts to be received is shown in the Remuneration Policy Report.

### Exceptional bonus

During the year Nevil Muncaster took on a significant amount of additional work over and above his usual workload and the Committee agreed that this was deserving of additional recognition from a remuneration perspective. It was therefore agreed that the Committee would exercise its discretion to pay a one-off bonus of 15% of his base salary to Nevil in July 2021 for his exceptional performance in the year ended 31 March 2021.

### 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, Kathy Smith, who can be contacted at: [compsec@yorkshirewater.co.uk](mailto:compsec@yorkshirewater.co.uk)



**Ray O'Toole**  
**Chair of the People and**  
**Remuneration Committee**  
 15 July 2021

# 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 following.

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 packages for executive directors are structured to enable upper quartile remuneration for upper quartile performance, considering the relevant market and industry comparators, individual performance, responsibilities, and experience.

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. This year the pay award for the executive directors has been delayed pending the outcome of the pay negotiations across the rest of the business to ensure that the pay award for the executive directors is appropriately aligned. 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 committee. During the year the business also set up 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 attends the forum on behalf of the Board and is 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

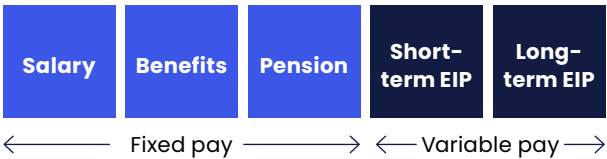
The committee may exercise discretion in two broad areas for each element of remuneration, as follows:

- 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; and
- 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, which 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 our 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?
<b>Fixed pay</b>			
<p><b>Base salary</b></p> <p>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>	<p>We normally review base salaries 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, calibre, and performance of the individual. Base salaries are usually set at or below the market median for the role when benchmarked against other water companies or other utility companies, this is offset by higher threshold and target levels of variable pay to encourage a focus on performance.</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 our 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?
<p><b>Benefits</b></p> <p>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>	<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"> <li>• Private medical insurance for the executive and their spouse;</li> <li>• Life assurance;</li> <li>• A choice of company car-lease or a car allowance of up to £7,500 per annum;</li> <li>• Medical screening; and</li> <li>• Optional private fuel provision.</li> </ul> <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>	<p>Benefits are not performance related.</p>	<p>There are no provisions to recover any sums paid.</p>
<p><b>Retirement benefits</b></p> <p>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.</p>	<p>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.</p>	<p>Retirement benefits are not performance related.</p>	<p>There are no provisions to recover any sums paid.</p>

Component of remuneration and how it supports our 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?
<b>Variable pay</b>			
<p><b>EIP – short-term element</b></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.</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. These are offset by base salaries that are usually set at or below the market median.</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 2022 are set out in more detail later in this section.</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 at any time over a two-year period in the event of misstatement of performance, errors in the assessment of performance conditions or misconduct.</p>

Component of remuneration and how it supports our 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?
<b>Variable pay</b>			
<p><b>EIP – long-term element</b></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.</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 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 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>All payments are at the ultimate discretion of the committee.</p>	<p>The performance measures in year one are described earlier in this table.</p> <p>The longer-term performance measures are designed to ensure that performance does not deteriorate after the in-year payment is made, and ensure that in year performance is not being enhanced to the detriment of the longer term.</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 at any time over a two-year period in the event of misstatement of performance, errors in the assessment of performance conditions or misconduct.</p>

## Non-executive directors' policy table

Component of remuneration and how it supports our 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?
<b>Fees</b>  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 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>	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.	There are no provisions to recover any sums paid.

## 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:

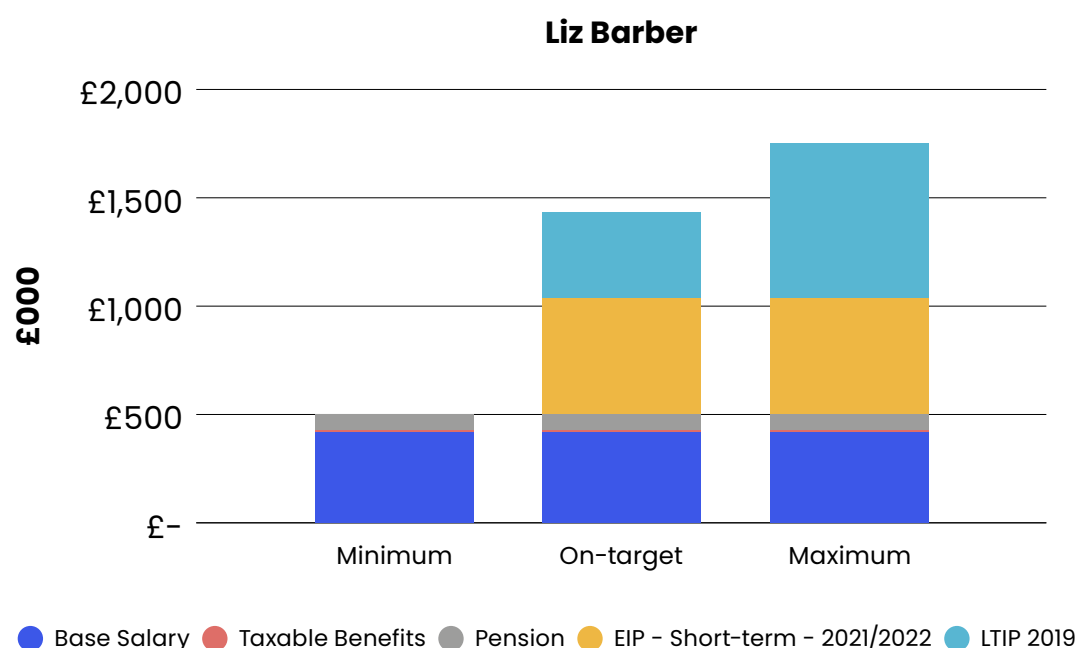
Remuneration component	Difference
<b>Base salary</b>	<p>Base salaries are reviewed in the same way for executive directors as for other senior colleagues, taking into account market rate information, internal reference points, individual performance, the scope of the role, the financial performance of 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
<b>Benefits</b>	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.
<b>Retirement benefits</b>	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 now consistent with colleagues across the business with a maximum company contribution of 10% of base salary.
<b>EIP</b>	<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 managers are also invited to participate in the EIP.</p> <p>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 three 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 a fixed amount depending on company performance.</p>

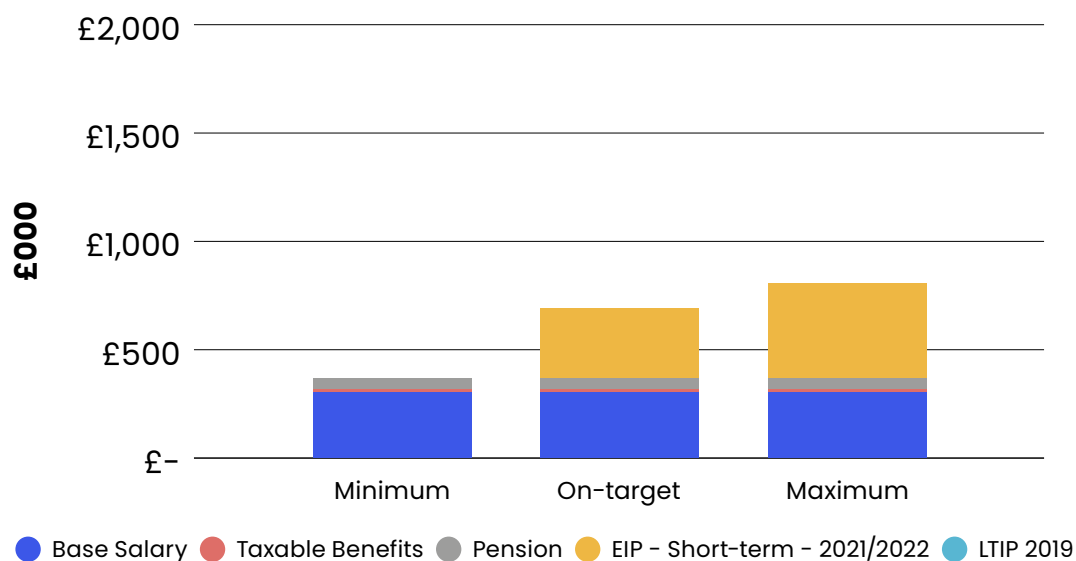
## What might executive directors be paid under the Remuneration Policy for 2021?

The charts below indicate how much each of the executive directors might receive under the Remuneration Policy for 2022 on a fixed, on-target and maximum basis.

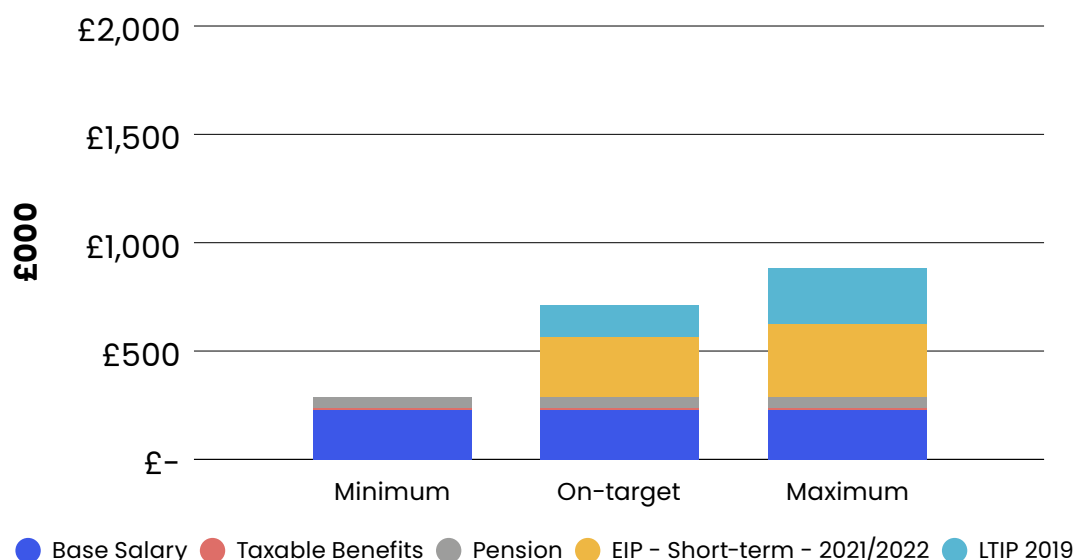
It should be noted that the previous LTIP scheme has an award from 2019 which may vest in 2022. The potential vesting of this has therefore been included in the graphs below. This represents a transitional period, beyond which the only variable pay receivable will be from the new EIP.



### Chris Johns



### Nevil Muncaster



### 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 or old LTIP scheme. Fixed pay comprises base salary, benefits, and retirement benefits. The base pay for 2021/2022 has been assumed to include a base salary increase of 1.75% for both Chris Johns and Nevil Muncaster with effect from 1 April 2021 but this has yet to be confirmed. The actual amount of any increase given will be reported in our Remuneration Report in 2022;
- **On-target** – where executive directors receive their fixed pay plus an EIP on-target pay-out of 80% of the maximum opportunity and vesting of 70% of the maximum under the old LTIP scheme awarded in 2019; and
- **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 the maximum vesting of the old LTIP scheme awarded in 2019.

It should be noted that the charts show what could be earned by the executive directors based on the 2022 Remuneration Policy described in this report and the numbers will therefore differ from those included in the Single Total Figure table which details what was actually earned by the executive directors in the year to 31 March 2021.



## 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
<b>Base salary</b>	<p>The salary would be provided at such a level as required to attract the most appropriate candidate. The aim would be to pay at or below the market median 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>
<b>Benefits</b>	<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>
<b>Retirement benefits</b>	<p>The maximum pension contribution will be set in line with the policy for executive directors at up to 10% of base salary.</p>
<b>Executive incentive plan</b>	<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>
<b>Buy-outs</b>	<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 Chris Johns

As noted elsewhere, Chris Johns joined the Board on 1 June 2020. In line with the remuneration policy, his agreed base salary of £300,000 was based on the market rate for the role, the salary Chris received in his previous role and his experience and expertise. His benefits, including retirement benefits, are all aligned to the policy for executive directors and the award made to him under the EIP was at a maximum of 150% for the short-term element and 150% for the long-term element, in line with policy and the other executive directors.

### Non-executive director recruitment

The fee structure for non-executive director appointments will be based on the non-executive director fee policy as set out in the policy table.

### The appointment of Vanda Murray

As noted elsewhere, Vanda Murray has joined our Board as an independent non-executive director and Chair designate from 1 July 2021. The fees to be paid to Vanda are the same as those paid to our current Chair, Anthony Rabin. These reflect the market rate for the role. Vanda will receive the full Chair fee from the date of her appointment given the significant amount of work that she will undertake over the summer as part of her handover from Anthony Rabin.

### Service contracts

Our policy is to set notice periods for executive directors at six months' notice from either party. Historically executive directors were recruited with 12 months' notice required from the company and six months from the director. These notice periods have not been changed retrospectively, therefore both Liz Barber and Nevil Muncaster are entitled to receive 12 months' notice from the company.

The current service agreement dates are set out in the table below:

Director	Date of appointment	Date of current service agreement
<b>Liz Barber</b>	24 November 2010 <sup>1</sup>	15 July 2019
<b>Chris Johns</b>	1 June 2020	27 September 2019
<b>Nevil Muncaster</b>	29 May 2013 <sup>2</sup>	13 March 2013

<sup>1</sup> Liz Barber joined the Board as Director of Finance, Regulation and Markets on 24 November 2010. She then became Chief Executive on 12 September 2019.

<sup>2</sup> Nevil Muncaster joined the Board as Director of Asset Management on 29 May 2013. He then became Chief Strategy & Regulation Officer on 1 October 2019.

## 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 chairman 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
<b>Anthony Rabin</b>	August 2013	9 September 2019
<b>Andrew Merrick</b>	June 2019	30 May 2019
<b>Vanda Murray</b>	July 2021	27 May 2021
<b>Ray O'Toole</b>	June 2014	13 November 2018
<b>Julia Unwin</b>	January 2017	13 November 2018
<b>Andrew Wyllie</b>	September 2017	9 July 2019

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
<b>Scott Auty</b>	September 2017
<b>Andrew Dench</b>	September 2017
<b>Mike Osborne</b>	September 2017

## 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
<b>Base salary</b>	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.
<b>Benefits and retirement benefits</b>	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.
<b>Variable Pay Schemes</b>	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.

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 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 2021 and describes how the policy will be implemented in 2022.

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 Johns¹		Nevil Muncaster		Richard Flint²		Total	
	2021 £'000	2020 £'000	2021 £'000	2020 £'000	2021 £'000	2020 £'000	2021 £'000	2020 £'000	2021 £'000	2020 £'000
Base salary	435	378	250	–	226	198	–	195	911	771
Taxable benefits	9	9	7	–	9	27	–	3	25	39
Retirement benefits³	52	63	30	–	27	39	–	93	109	195
Sub-total	496	450	287	–	262	264	–	291	1,045	1,005
EIP – short term element⁴	548	283	315	–	285	126	–	146	1,148	555
Exceptional bonus⁵	–	–	–	–	34	–	–	–	34	–
LTIP⁶	272	430	–	–	114	185	–	496	386	1,111
Sub-total	820	713	315	–	433	311	–	642	1,568	1,666
Total	1,316	1,163	602	–	695	575	–	933	2,613	2,671

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. Richard Flint retired from the Board on 12 September 2019. The payments in the table above reflect the payments made to Richard whilst in his role as a director.

3. Liz Barber opted for a full salary supplement instead of a contribution to the Kelda Stakeholder+ Plan. She received a cash sum of £52,200 (2020: £63,433) in the year.

Chris Johns opted into the Kelda Stakeholder+ Plan with a partial salary supplement. He received a total cash sum of £19,500 in the year and a pension contribution of £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 £27,120 (2020: £39,561) in the year.

4. The EIP scheme began in 2021. Therefore, the comparative figure for the EIP – short-term element for 2020 has been taken to be the annual bonus payment received in that year.

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. This is to be paid in July 2021.

6. The figures included above for the LTIP that vested during the year relate to the LTIP awards granted in 2018 which vested on 1 May 2021.

## 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 underlying financial performance has been satisfactory over the performance period, considering any relevant factors, including the regulatory regime in place over the period. 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 2020

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 Nevil Muncaster with effect from 1 April 2020 and to Chris Johns with effect from 1 June 2020. The performance period for the short-term element ran to 31 March 2021.

The committee assessed performance in the year against the performance criteria set out below. This indicated that the vesting was at 84.0%. 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, and agreed that no discretionary reduction should be applied, given the strong performance that had been demonstrated in an extremely challenging year. This means that 84.0% of the 150% maximum, equivalent to 126.0% of base salary, will be paid in cash to the executive directors in July 2021, with 84.0% 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 2023, July 2024 and July 2025. Any amounts that vest under this scheme will be reported in the Directors' remuneration reports for the years ended 31 March 2023 to 2025. Any amounts that vest under this scheme will be reported in the Directors' Remuneration Reports for the years ended 31 March 2023 to 2025.

The performance measures for the short-term element vesting in March 2021 are shown below:

		<b>Threshold level – vesting starts to accrue</b>	<b>Target level – 80% of maximum vesting generated</b>	<b>Maximum level – maximum vesting generated</b>	<b>Actual performance</b>
<b>Target</b>	<b>Weighting</b>	<b>Performance required</b>	<b>Performance required</b>	<b>Performance required</b>	<b>Performance achieved</b>
<b>Operational and financial – 35%</b>					
<b>Operating expenditure</b>	12.5%	2% below target	In line with business plan	2% above target	Outside target 0% vesting
<b>Capital expenditure</b>	12.5%	10% below target	In line with business plan	In line with business plan	In line with business plan 12.5% vesting
<b>Operating cash</b>	10%	5% below target	In line with business plan	5% above target	More than 5% above target 10% vesting
<b>Customer, people and environment – 60%</b>					
<b>Colleague engagement score</b>	5%	72%	75%	78%	73% 2% vesting
<b>Health and safety – LTIR</b>	5%	0.36	0.32	0.306	0.21 5% vesting
<b>Operational carbon</b>	5%	2.4%	2.4%	2.5%	6.6% 5% vesting
<b>Environment – EPA rating</b>	5%	3*	3*	4*	4* 5% vesting
<b>Customer satisfaction – C-MeX and D-MeX</b>	5%	Nil penalty	Nil penalty	>£1 million reward	£456,000 reward 4.5% vesting
<b>Accrued ODIs</b>	25%	In line with business plan	In line with business plan	15% above target	More than 15% above target 25% vesting
<b>Transformation</b>	10%	Assessment by committee	Assessment by committee	Assessment by committee	Milestones met – assessed to be 10% vesting
<b>Strategic / other – 5%</b>					
<b>CMA process</b>	5%	Assessment by committee	Assessment by committee	Assessment by committee	Milestones met – assessed to be 5% vesting



These measures were selected by the committee to reflect the priorities of the business both during 2021 and in the long-term and to reflect the needs of stakeholders through 60% of the performance being aligned to the needs of customers, people, and the environment.

The measures that have been agreed by the committee for the long-term element of the scheme are shown below. Performance against these measures will be reported in the Remuneration Report for the year ended 31 March 2023 onwards. All measures are set to ensure that the position achieved at the end of the initial performance year is maintained.

**Financial capital – 35%** – maintenance of our credit ratings position.

**Human capital – 16%** – no deterioration, beyond a certain threshold, in our colleague engagement score and our Lost Time Injury Rate.

**Social capital – 33%** – no deterioration, beyond a certain threshold, in our C-MeX score and our ODI financial impact.

**Environmental capital – 16%** – no deterioration, beyond a certain threshold, in our carbon emissions or Environmental Performance Assessment.

## Outstanding awards under the EIP as at 31 March 2021

Only the awards made under the long-term element of the EIP scheme are carried over to subsequent years. These are set out below:

	Liz Barber	Chris Johns	Nevil Muncaster
<b>Effective date of award</b>	01.04.2020	01.06.2020	01.04.2020
<b>Awards brought forward at 1 April 2020</b>	–	–	–
<b>Awards made in the year £'000</b>	1,305	750	678
<b>Lapsed during the year £'000</b>	209	120	108
<b>Awards outstanding at 31 March 2021 £'000</b>	548	315	285
<b>Long-term element carried forward at 31 March 2021 £'000'</b>	548	315	285
<b>Face value of maximum award £'000</b>	1,305	750	678
<b>Award that would vest at threshold performance £'000</b>	1,044	600	542
<b>Earliest date of vesting</b>	01.05.2023	01.05.2023	01.05.2023

## 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. The last awards under the scheme were made with effect from 1 April 2019. Any amounts that vest are paid in cash to participants in July of each year.

### LTIP awards vesting in 2021

On 1 April 2018, 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 2018, and the performance achieved in the three-year period to 31 March 2021, are shown in the table below.

Performance Condition	Performance
<b>Cashflow performance over the performance period:</b>  < 90% of target – no LTIP vesting  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%	Adjusted EBITDA indicates a vesting of 45.3%.
<b>The performance above could then be reduced by the percentage indicated if the performance measures below were not met:</b>	
<b>People – 20%</b>	
Three year health and safety improvement – 10%	Target met
Three year colleague engagement improvement – 10%	Target met
<b>Customer experience – 40%</b>	
C-MeX and D-MeX – 20%	Target met
Bill affordability, direct support to customers, awareness of priority services and meeting vulnerable customer needs – 20%	Target met
<b>Resilience – 40%</b>	
Asset health – 10%	Target met
Leakage – 10%	Target met
Partnerships and land – 10%	Target met
Drought and flood risk – 10%	Target met

The performance in the year therefore indicated a vesting of the 2018 LTIP awards of 45.3%. This was discussed by the Committee and independent verification of the calculations was provided by KPMG. It was decided that the vesting reflected actual performance in the year and therefore the vesting of 45.3% was approved for payment in July 2021.

## Outstanding awards under the LTIP scheme as at 31 March 2021

	Liz Barber		Nevil Muncaster		Richard Flint		Pamela Doherty
Effective date of award	01.04.2018	01.04.2019	01.04.2018	01.04.2019	01.04.2018	01.04.2019	01.04.2018
Awards outstanding at 1 April 2020 £'000	600	618	253	261	591	282	70
Vested during the year £'000	272	-	114	-	255	-	32
Lapsed in the year £'000	328	-	139	-	336	-	38
Awards outstanding at 31 March 2021 £'000	-	618	-	261	-	282	-
Face value of maximum award £'000	600	618	253	261	591	282	70
Award that would vest at threshold performance £'000	420	433	177	182	394	197	49
Earliest date of vesting	01.05.2021	01.05.2022	01.05.2021	01.05.2022	01.05.2021	01.05.2022	01.05.2021

### 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)

Payments will be made in July 2021 to Richard Flint and Pamela Doherty who are both past executive directors of the company. These payments relate to the LTIP scheme vesting in 2021 and amount to £255,069 to Richard Flint and £31,827 to Pamela Doherty.

## Non-executive directors

### Single total figure table (audited)

The total annual fees paid to each non-executive director are shown below.

Non-executive director	2021 £'000	2020 £'000
Anthony Rabin <sup>1</sup>	275	275
Andrew Merrick <sup>2</sup>	60	50
Ray O'Toole	70	70
Julia Unwin	60	60
Andrew Wyllie <sup>3</sup>	60	56

1. The fee for Anthony Rabin includes his other responsibilities in relation to other Kelda Group Limited companies but is shown here in full. The proportion of his time spent on other group companies is recharged to the relevant company. This is explained in more detail in note 5 to the Financial Statements.
2. Andrew Merrick joined the Board on 1 June 2019 and therefore received a pro rata fee in the prior year.
3. Andrew Wyllie became Chair of the Health and Safety Committee in September 2019 and therefore received a pro-rated fee for this role in the prior year.

The investor directors do not receive any remuneration from Yorkshire Water.

## Remuneration of the Chief Executive

The table below sets out the remuneration for our Chief Executive in each of the last nine years. On 12 September 2019 a new chief executive was appointed and therefore the figures show the combined total paid to Richard Flint for the period from 1 April 2019 to 12 September 2019 and to Liz Barber for the period from 13 September 2019 to 31 March 2021.

	2021 £'000	2020 £'000	2019 £'000	2018 £'000	2017 £'000	2016 £'000	2015 £'000	2014 £'000	2013 £'000
<b>Total remuneration</b>	1,316	1,469	1,328	932	1,328	1,231	1,291	861	1,288
<b>Annual bonus paid against maximum opportunity</b>	84.0%	74.8%	64.6%	67.7%	73.5%	60.0%	87.0%	80.0%	85.0%
<b>Long-term incentive vesting against maximum opportunity</b>	45.3%	74.8%	50.0%	-	50.0%	50.0%	75.0%	-	60.0%

## Chief executive pay ratio

The table below shows the pay ratio of our chief executive as required by the Companies (Miscellaneous Reporting) Regulations 2018.

Year	Method	25 <sup>th</sup> percentile pay ratio	Median pay ratio	75 <sup>th</sup> percentile pay ratio
2020/2021	Option A	46:1	35:1	26:1
2019/2020	Option A	53:1	40:1	31:1

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 below 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 2021 and who were still employed on that date;
- Using the total pay and benefits received in respect of the year ended 31 March 2021, 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 Chief Executive 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 45 colleagues, with none of the individuals identified as the 25<sup>th</sup> percentile, median or 75<sup>th</sup> percentile receiving an EIP award this year.

We have observed a decrease in the pay ratio compared with last year. This is primarily driven by a decrease in overall variable pay outcomes for 2021 and a reduction in the pension contribution for the CEO. However, at the same time, the total pay and benefits of the wider workforce has increased compared with last year which has further contributed to the reduction in the pay ratio. This has been as a result of a combination of factors including positive annual bonus payments and the application of a 2% pay award in April 2020.

Presented in the table below are the base salary and the total pay and benefits for those colleagues at the 25<sup>th</sup> percentile, the median and the 75<sup>th</sup> percentile:

	25 <sup>th</sup> percentile	Median	75 <sup>th</sup> percentile
<b>Base salary</b>	£20,258	£26,327	£35,700
<b>Total pay and benefits</b>	£28,861	£38,040	£49,798

The pay ratio calculation shows that, in total remuneration terms, the Chief Executive earns 35 times (2020: 40 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 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 2020 and 2021		
	Salary	Taxable benefits <sup>1</sup>	Annual bonus
<b>Chief executive</b>	No change	No change	68.5% increase
<b>All colleagues</b>	2.0% increase	No change	18.9% increase

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 2021 as at 31 March 2020 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 2021 £m	Year ended 31 March 2020 £m	Percentage change %
<b>Total remuneration cost for all colleagues<sup>1</sup></b>	171.2	153.2	12
<b>Total distributions made<sup>2</sup></b>	45.2	110.0	(59)

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 £45.2m (2020: £47.8 million) of distributions made to the parent company to make interest and loans payments.

## Implementation of policy for 2022

The table below sets out how we will implement the Remuneration Policy for the 2022 financial year:

Implementation in 2022	
<b>Base salary</b>	<p>The committee reviewed base salaries in March 2021 and agreed a provisional increase of 1.75% based on a number of factors, including prevailing market and external economic data. This is yet to be confirmed, however, and has not yet been applied. The final increase will be reported in our Remuneration Report in 2022. Once it is confirmed it will be backdated to take effect as at 1 April 2021. As in the previous year, Liz Barber chose to waive her increase. In addition, base salaries for all three executive directors have been increased to offset the impact of a reduction in employer pension contributions from 1 April 2021 from 12% to 10%. The base salaries for 2022 are therefore expected to be as follows:</p> <ul style="list-style-type: none"> <li>• Liz Barber: £442,909 from 1 April 2021</li> <li>• Chris Johns: £310,800 from 1 April 2021</li> <li>• Nevil Muncaster: £234,136 from 1 April 2021</li> </ul>
<b>Benefits</b>	Benefits remain unchanged from 2021.
<b>Retirement benefits</b>	Retirement benefits have reduced from 1 April 2021, as noted above, with company pension contributions at 10% of base salary.
<b>EIP</b>	EIP awards made with effect from 1 April 2021 are equivalent to a maximum of 150% of base salary for all 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 has not proposed any increase to non-executive director fees for the 2022 financial year. This will next be subject to an annual review in March 2022. The current fees to be paid are set out below:

	£'000
<b>Chairman fee</b>	275
<b>Base independent non-executive director fee</b>	50
<b>Additional fee for committee chair<sup>1</sup></b>	10
<b>Additional fee for senior independent director</b>	10

1. The additional fee for the role of Committee Chair is not paid to the Chairman for his role as Nomination Committee Chair. The fee paid to Anthony as Chairman already encompasses his additional role as Committee Chair.



## People and Remuneration Committee

The membership and attendance at committee meetings during the year is shown in the Directors Report. Meetings are also attended by the Chief Executive, the Chief People Officer, the Head of Reward, and the Company Secretary. Liz Barber, our Chief Executive, is not present when her own reward is discussed.

The People and Remuneration Committee is a sub-committee of the Board and has six 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
<b>May 2020</b>	<ul style="list-style-type: none"> <li>• Review of the results from the Yorkshire Water Voice colleague engagement survey.</li> <li>• Update on the performance in relation to the LTIP for 2017-2020 and the annual bonus scheme for 2020.</li> <li>• Approval of the measures for the EIP award in 2020.</li> <li>• Review of the draft Remuneration Report for 2020.</li> </ul>
<b>June 2020</b>	<ul style="list-style-type: none"> <li>• Review of pension arrangements across the business.</li> <li>• Update on the performance in relation to the LTIP for 2017-2020 and the annual bonus scheme for 2020.</li> </ul>
<b>July 2020</b>	<ul style="list-style-type: none"> <li>• Finalisation of the measures for the EIP award in 2020.</li> <li>• Conclusion on the vesting of the LTIP for 2017-2020 and the annual bonus scheme for 2020.</li> </ul>
<b>November 2020</b>	<ul style="list-style-type: none"> <li>• Update on the future talent strategy across the organisation, including a detailed update on the graduate programme and apprenticeship scheme.</li> <li>• Update on performance of the measures in relation to the EIP short-term element for 2021.</li> <li>• Comparison of EIP measures to those elsewhere in the industry.</li> <li>• Review of committee terms of reference.</li> <li>• Review of the results from the Yorkshire Water Voice colleague engagement survey.</li> <li>• Review and approval of the gender pay gap and ethnicity pay gap reports for publication.</li> </ul>

Meeting	Matters considered
<b>January 2021</b>	<ul style="list-style-type: none"> <li>• Update on the new proposed approach to performance management across the business.</li> <li>• An update on the remuneration market from Willis Towers Watson.</li> <li>• An update on pay negotiations and the pay review budget across the organisation.</li> <li>• Approval of the final draft of the EIP rules.</li> </ul>
<b>March 2021</b>	<ul style="list-style-type: none"> <li>• Review and approval of the pay awards for executive directors and senior management, effective from 1 April 2021.</li> <li>• Update on the performance in relation to the LTIP for 2018–2021 and the EIP short-term element for 2021.</li> </ul>

During the year under review, the committee received remuneration advice from PwC LLP and Willis Towers Watson.

Willis Towers Watson received fees of £40,050 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 is a signatory 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 PricewaterhouseCoopers LLP and Willis Towers Watson operate and their relationships with the business and is satisfied that the advice it receives is independent and objective.

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;
- Giving full consideration to 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 at:

## Consideration of shareholders' views

The appointment of three directors representing shareholders to the Board of Yorkshire Water in September 2017 enables a direct flow of communication and sharing of views by shareholders to the Board. Two directors representing our shareholders sit on the People and Remuneration Committee.

## Outside appointments

No fees were received by the executive directors for outside appointments in the year under review.

Signed by order of the Board

A handwritten signature in black ink, appearing to read 'Kathy Smith', is written over a faint, light blue rectangular background.

**Kathy Smith**  
**Company Secretary**  
15 July 2021

# Long-term viability statement

**We publish our long-term viability statement in our Annual Reports and Financial Statements (ARFS) on page 65 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 59. [Click here to view our ARFS on our reports webpage:](#)**



# **7. Transactions with associates and the non-appointed business**

<b>Loans by or to the appointee</b>	<b>379</b>
<b>Dividends paid to any associated company</b>	<b>381</b>
<b>Guarantees or other forms of security by the appointee</b>	<b>382</b>
<b>Transfer of any asset or liability by or to the appointee</b>	<b>382</b>
<b>Transfer of any corporation tax group losses by or to the appointee</b>	<b>383</b>
<b>Supply of any service by or to the appointee</b>	<b>384</b>



# 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 subsidiary companies have on-lent to Yorkshire Water sums raised from the issue of corporate debt:

### **1. Yorkshire Water Finance plc**

Yorkshire Water Finance plc (YWFplc) is a public limited company incorporated in England and Wales on 2 July 2018 under the Companies Act (registered number 11444372) and has its registered office at Western House, Halifax Road, Bradford, BD6 2SZ, England.

As part of a re-organisation that took place in the 2018/2019 financial year, YWFplc was substituted as the issuer on approximately £3 billion of listed bonds and private notes that had been previously 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).

YWFplc is a wholly owned subsidiary of Yorkshire Water and it is intended that it 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 ("Totex").

### **2. Yorkshire Water Services Finance Limited**

Yorkshire Water Services Finance Limited (YWSFL) is a private company incorporated with limited liability in England and Wales (registered number 04636719) and has its registered office at Western House, Halifax Road, Bradford, BD6 2SZ, England.

YWSFL is a wholly owned subsidiary of Yorkshire Water.

YWSFL is the issuer of legacy bonds that have been on-lent to (and guaranteed by) Yorkshire Water. However, YWSFL 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 YWFplc.

**As at 31 March 2021 Yorkshire Water has guaranteed the following bonds and private notes issued by its subsidiaries:**

	Nominal £m	Coupon %	Maturity Date Year	Liability at 31 March 2021 £m
<b>Fixed Rate</b>				
Yorkshire Water Services Finance Limited	6.703	5.375	2023	6.071
Yorkshire Water Services Finance Limited	7.400	5.500	2027	6.804
Yorkshire Water Services Finance Limited	0.100	6.625	2031	0.782
Yorkshire Water Services Finance Limited	200.000	5.500	2037	195.822
Yorkshire Water Finance Plc	72.300	3.770	2021	84.332
Yorkshire Water Finance Plc	25.100	3.770	2022	29.368
Yorkshire Water Finance Plc	47.200	5.070	2022	55.037
Yorkshire Water Finance Plc	210.700	6.588	2023	210.552
Yorkshire Water Finance Plc	94.300	3.870	2023	113.856
Yorkshire Water Finance Plc	33.800	5.875	2033	29.676
Yorkshire Water Finance Plc	18.800	3.870	2024	22.786
Yorkshire Water Finance Plc	300.000	1.750	2026	298.566
Yorkshire Water Finance Plc	135.500	6.454	2027	135.365
Yorkshire Water Finance Plc	60.000	2.030	2028	59.800
Yorkshire Water Finance Plc	250.000	3.625	2029	264.914
Yorkshire Water Finance Plc	90.000	3.540	2029	102.353
Yorkshire Water Finance Plc	255.000	6.601	2031	254.755
Yorkshire Water Finance Plc	50.000	2.140	2031	49.813
Yorkshire Water Finance Plc	90.000	4.965	2033	105.281
Yorkshire Water Finance Plc	50.000	2.210	2033	49.803
Yorkshire Water Finance Plc	40.000	2.300	2036	39.834
Yorkshire Water Finance Plc	50.000	2.300	2036	49.793
Yorkshire Water Finance Plc	300.000	6.375	2039	302.584
Yorkshire Water Finance Plc	450.000	2.750	2041	444.877
Yorkshire Water Finance Plc	200.000	3.750	2046	196.439
<b>Total fixed rate</b>				<b>3,109.263</b>
Yorkshire Water Services Finance Limited	0.100	3.048	2033	-0.752
Yorkshire Water Services Finance Limited	65.000	1.823	2050	93.184
Yorkshire Water Services Finance Limited	125.000	1.462	2051	184.271
Yorkshire Water Services Finance Limited	85.000	1.758	2054	122.025
Yorkshire Water Services Finance Limited	125.000	1.460	2056	184.208
Yorkshire Water Services Finance Limited	100.000	1.709	2058	143.330
Yorkshire Water Finance Plc	127.800	3.307	2033	173.972
Yorkshire Water Finance Plc	260.000	2.718	2039	369.343
Yorkshire Water Finance Plc	50.000	2.160	2041	61.669
Yorkshire Water Finance Plc	50.000	1.803	2042	61.140
<b>Total inflation linked</b>				<b>1,392.390</b>



# Dividends paid to any associated company

Intra-group dividends of £45.2m were paid in the year (2020: £110.0m), broken down as follows:

	2020 £'m	2021 £'m
Dividends used to make inter-company interest payments	43.2	47.8
Dividends used by Kelda Group to pay head office costs and Kelda Finance group interest and fees	2.0	62.2
<b>Total</b>	<b>45.2</b>	<b>110.0</b>

## Shareholder dividend policy is to:

- Deliver a base dividend from a set yield that 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;
- Be transparent in the calculation and payment of dividends and to clearly justify the payment in relation to the factors outlined above; and
- Where it is foreseeable we will have sufficient profits available for distribution and subject to appropriate financial resilience testing, to continue to pay dividends consistent with this policy.

Any distributions available to the shareholders of Kelda Holdings Limited are determined by the amount payable in accordance with the above policy, after deducting dividends used to pay head office costs for Kelda Group and Kelda Finance group interest and fees. There were no distributions to shareholders in 2021.

In the current year, £2.0m was used to pay interest and fees on debt issued by Kelda Finance (No.2) Limited, whilst in the prior year, £62.2m was used to pay interest on debt issued by Kelda Finance (No.2) Limited and Kelda Finance (No.3) Plc together with head office costs. The 2020 amount substantially covered requirements for both 2021 (£30.1m) and 2020 (£32.1m).

No dividends have been proposed post year-end in relation to 2021 (2020: £nil).

# Guarantees or other forms of security by the appointee

Certain bank accounts held by Yorkshire Water and its subsidiaries form a pooled arrangement, whereby the balances on accounts are offset with each other. This facility is subject to a provision of a cross guarantee between YWSL and YWSFL whereby each company guarantees the current account liabilities of certain bank accounts held with the other. This pooling arrangement has a net overdraft limit of £5.0m.

As disclosed above, Yorkshire Water has also guaranteed bonds issued by its subsidiaries.

# Transfer of any asset or liability by or to the appointee

There were no transfers of any assets or liabilities by or to the appointee in 2020/2021.

# 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
61.521	Kelda Eurobond Co Limited	nil	Prevailing corporation tax rate	11.689
16.457	Kelda Finance (No2) Limited	nil	Prevailing corporation tax rate	3.127
1.671	Kelda Group Limited	8.802	Prevailing corporation tax rate	0.318
0.786	KeyLand Developments Limited	3.241	Prevailing corporation tax rate	0.149
0.285	Three Sixty Water Limited	7.998	Prevailing corporation tax rate	0.054
0.014	Kelda Transport Management Limited	2.122	Prevailing corporation tax rate	0.003
<b>80.733</b>				<b>15.339</b>

# 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 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's strategy to focus on wholesale and household retail activities the sale of the non-household retail customer base was completed in 2019.

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 & KTML.

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	8.802	Cost allocation	7.832
Customer services (HH)	Loop Customer Management Limited	29.495	Cost allocation	26.775
Property services	KeyLand	3.241	Cost allocation	0.000
Transport Management	KTML	2.122	Management charge	2.122

Yorkshire Water also charges Kelda Group/associates for any support service function activity this includes functions such as IT, facilities charges and a number of other common services within the Group. The cost and revenues associated with this is allocated to non-appointed and follows RAG 5 guidelines.

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
Business support services	Kelda Group Limited	8.802	Cost allocation	0.955
	Loop Customer Management Limited	29.495	Cost allocation	1.461
	Three Sixty Water Limited	0.000	Cost allocation	0.542

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