

A young child with brown hair is shown from the side, focused on washing their hands in a sink. They are holding a blue bowl and a yellow sponge. Their arms are covered in white soap foam. In the background, the lower half of an adult's face is visible, smiling. The scene is brightly lit, likely from a window.

Severn Trent Annual Performance Report 2019

Republished

WONDERFUL ON TAP

SEVERN
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Welcome to the Severn Trent Water Annual Performance Report 2019

Our purpose is to serve our communities and build a lasting water legacy. This drives our vision to be the most trusted water company by 2020, delivering an outstanding customer experience, best value service and environmental leadership.

WONDERFUL ON TAP



This report provides our customers and other stakeholders with clear and transparent information on all aspects of our performance in 2018/19, including the progress we have made to deliver our customer outcomes.

About us

We're one of the largest of the 11 regulated water and sewerage companies in England and Wales. We provide high quality services to around 4.4 million households and businesses in the Midlands. Our region stretches across the heart of the UK, from the Bristol Channel to the Humber, and from Shropshire to the East Midlands.

Through our Company values we deliver the commitments expected of a leading, socially responsible company.

- We put our customers first.
- We are passionate about what we do.
- We act with integrity.
- We protect our environment.
- We are inspired to create an awesome company.

Litres of drinking water
supplied each day

1.9 billion

Litres of waste water
treated per day

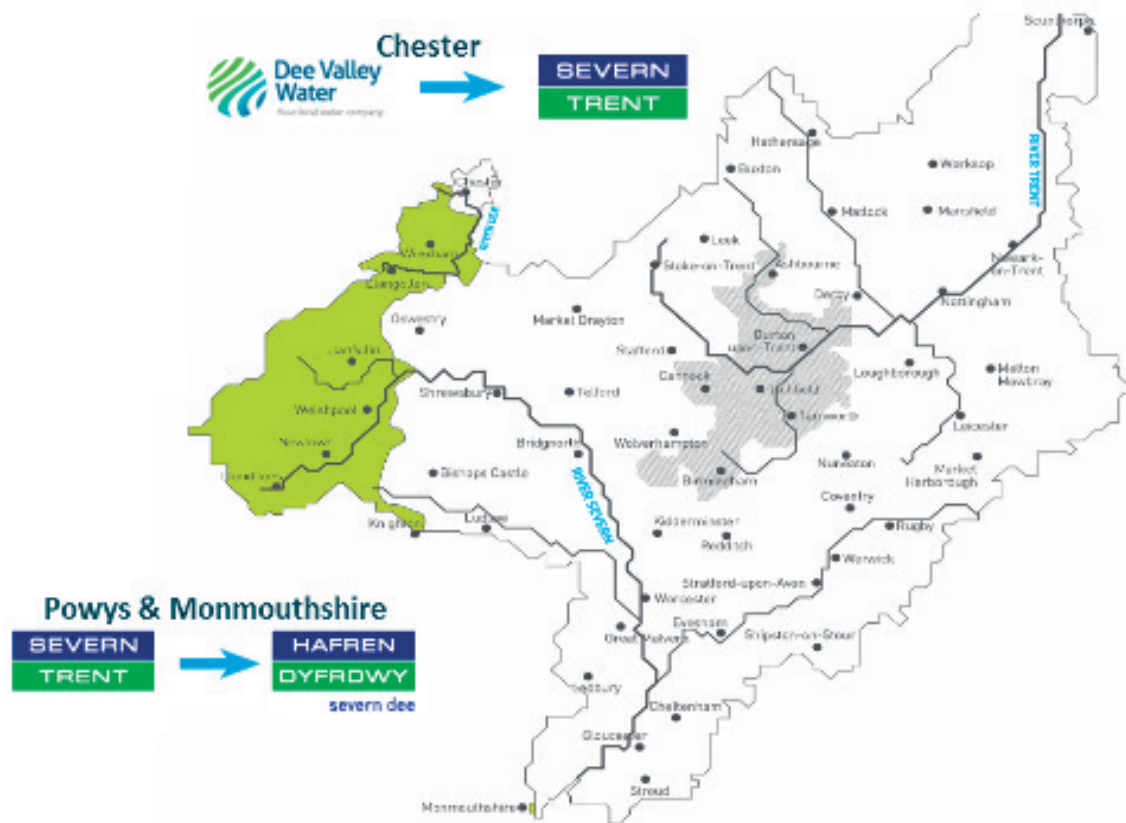
2.9 billion

Number of households and
business served

4.4 million

Average number of
employees

6,170



Changes in our region during the year

On 1 July 2018, as part of the boundary alignment agreed with Ofwat, our customers in Powys and Monmouthshire in Wales, transferred to our subsidiary company Hafren Dyfrdwy. On the same date Severn Trent Water acquired the customers in Chester, England, from Hafren Dyfrdwy.

Ownership

Severn Trent Water Limited is the principal subsidiary of Severn Trent Plc. The full ownership structure of the Company within the Severn Trent Group can be found on the Severn Trent Plc website at severntrent.com.

Serving our communities

Every five years we work with our customers to develop new business plans which we agree with our economic regulator, Ofwat. Our plans include commitments to improve our performance. These commitments are in the areas of service that are most important to our customers.

Our business plan for 2015-2020 agreed with Ofwat in 2014 includes 10 outcomes with 45 associated performance commitments, of which 33 have financial incentives. These performance commitments are in the areas of service which are most important to our customers. In addition, on 1 July 2018, we acquired 11 performance commitments included in the Dee Valley Water plan relating to our customers in Chester who transferred from Hafren Dyfrdwy (previously Dee Valley Water) from 1 July 2018.

What your bills paid for

Our average household bill for water and sewerage during the year was £348 per year, or just 95 pence per day. We're proud to say that this was the lowest combined bill across England for the ninth consecutive year.

About this report

Clear and transparent reporting

Providing accurate, clear and understandable information which can be trusted by our stakeholders is important to us. Our Annual Performance Report ('APR') ensures our customers and stakeholders can clearly see how we've performed.

It provides:

- A clear and assured account of our financial performance for each price control, based on Ofwat's regulatory accounts framework, to enable customers and stakeholders to consistently assess our relative and absolute performance.
- A clear, detailed and assured account of our performance across our 56 performance commitments in the year. This includes 11 performance commitments in respect of our customers in Chester who transferred from Hafren Dyfrdwy on 1 July 2018.
- In areas where we've not performed as well, the actions we've taken to put things right.

This report is our fourth APR for the period 2015-2020 and covers the period 1 April 2018 to 31 March 2019.

To enhance the transparency of our reporting we have extended the scope of the 2018/19 APR to include reporting requirements which have previously been published separately. We believe that this will support our customers and other stakeholders to access and use the information which is relevant to them. We have included the following additional sections:

- An overview of our Company performance and direction
- A section which explains our Board structure and vision and outlines how we meet our statutory duties and obligations. This section includes our Board's annual Risk and Compliance Statement.
- Our annual Assurance summary is included as an appendix to the APR.

Changes to performance commitments during the year

Following the boundary alignment on 1 July 2018 the performance commitments for the Company have been agreed with Ofwat to ensure the interests of our customers in both companies are fairly represented. Our customer challenge group were consulted during this process.

To make sure customers in Chester remain protected by the targets originally agreed with Ofwat, we've provided an update for each of the 11 performance commitments originally agreed by Dee Valley Water. The targets reflect performance levels agreed with Ofwat as appropriate for customers in the Chester region

For customers in the remaining Severn Trent region we've provided an update on the 45 performance commitments agreed by Severn Trent Water. The targets reflect performance levels agreed with Ofwat for customers in England.

In addition to the changes following the boundary alignment, in December 2018, we agreed to accept more challenging targets and incentive rates for some of our waste water performance commitments in exchange for Ofwat raising the waste water financial ODI cap. In this document we explain our performance against our revised performance commitments and incentive levels.



The remainder of our 2018/19 APR is set out in the following sections:

Explaining company performance and direction	Summarises our performance during the year and our areas of focus going forwards for our key stakeholders.
Our Board, governance and compliance	Sets out our Board structure, vision and how we have met our regulatory duties and obligations, including Ofwat's 2019 Board leadership principles, to our customers during the year. This section also includes statements from our non-financial assurers and our Board's Risk and Compliance Statement.
Regulatory statements	Contains the regulatory statements approved by our Board.
Annual performance summary	Commentary on our operational performance in 2018/19.
Regulatory accounts	Regulatory accounting data and disclosures including Ofwat's data tables section 1 and section 2, and our Independent auditor's report.
Additional regulatory information	Ofwat's data tables section 3 and section 4 and supplementary disclosures.
Appendix 1 Assurance summary	A summary of the assurance undertaken to support our regulatory reporting during the year and the findings of that assurance.

Additional regulatory publications

In addition to the APR, we are publishing the following documents:

- A customer summary which summarises our performance in a way that meets our customers' needs. We'll publish this later in the summer so that we can include comparative performance data.
- A methodology statement which explains the systems and processes used to populate the data tables in the Regulatory accounts.

Severn Trent Water Limited has also published its Annual Report and Accounts ('ARA') for the year ended 31 March 2019 which is available on our website stwater.co.uk. Where disclosures in the ARA fulfil the requirements of the APR we have included a cross reference to the relevant section for further information.

Explaining company performance and direction

Delivering for those we serve

Our purpose is to serve our communities and build a lasting water legacy. This drives our vision to be the most trusted water company, delivering an outstanding customer experience, best value service and environmental leadership.

Our Board is responsible for establishing our purpose, vision, aspirations and strategy, see more on page 14.

We are proud to be a pathfinder for a new breed of long-term, socially purposeful companies working to improve our country's infrastructure. This means that we aim to make the most of our contribution to society as a whole and improve the environment.

Our purpose connects us with our customers and communities, inspires our people, attracts investors and reinforces that in the long-term we all share the same interests. We believe that transforming our services and driving growth will lead to mutual benefit for all, with performance that delivers benefits to one group also delivering for others. The interests of our stakeholders are often interlinked, with many shareholders also being our customers, employees and pensioners.

We engage with our customers and our Customer Challenge Group, the Water Forum, an independent multi-stakeholder group, to develop our business plans for each five year regulatory period. Our customer outcomes and performance commitments reflect the issues which matter to them most. For the period 2015-20 ('AMP6') we have agreed 10 outcomes and 45 performance commitments, plus the additional 11 performance commitments which transferred from our group company Hafren Dyfrdwy, see page 6 for further information.

We are delighted that in January 2019, Severn Trent Water was one of only three companies to be awarded fast-track status by Ofwat for our 2020-25 business plan ('PR19'). Our plan was shaped by the largest engagement exercise we have ever coordinated, consulting with 32,000 customers and considering a further 1.9 million customer views. This detailed engagement means we truly understand what matters to our customers. The result was a plan which contains 9 outcomes and 41 performance commitments on the issues which matter most to our customers.

The key stakeholders we serve are our customers and communities, our people, our environment and our investors. Our suppliers and partners support us in delivering for our stakeholders and we are regulated by Ofwat as well as a number of other regulators and public bodies. The rest of this section summarises how we have performed during 2018/19 for each of these stakeholders. For more detailed information please see the Severn Trent Water Annual Report Accounts on our website **stwater.co.uk**.

Our customers

We serve over 9 million customers. Our customers are at the heart of everything we do and we aim to anticipate and meet changing customers' and wider societal needs. In preparing our business plan for PR19 we completed our largest engagement exercise ever and were pleased that our customers gave it an 85% acceptability rating.

Our research confirmed that the most important issues for our customers are: affordability, providing a clean water supply and taking away waste water, investing in our infrastructure, supporting our communities and making it easier for our customers to

communicate with us. We've made good progress on each of these priorities in 2018/19.

For the ninth consecutive year our customers enjoyed the lowest bills in England with an average combined bill of £348 - more than £59 lower than the average bill and £152 lower than the highest. Over the next five years we'll be reducing bills by a further 5% in real terms, while investing more and making further improvements in our services.

We're proud of our efforts to do more each year to help vulnerable customers who are struggling to pay their bills. Our Big Difference scheme helped over 37,000 customers access discounts of up to 90%. This is just one of our schemes that enable us to meet our commitment to help at least 50,000 customers with their bills every year. Looking ahead, we intend to help even more of our customers and have committed to supporting almost 50% more people between 2020 and 2025.

Our Annual performance summary on pages 31 to 57 outlines how we have performed on each of our performance commitments, which are the most important measures to our customers. These performance commitments have associated outcome delivery incentives ('ODIs'). This includes two key investment commitments - the Birmingham Resilience project and the Water Framework Directive.

We've made it even easier for our customers to contact us through whichever mode they prefer, whatever time of day. We've also launched our new online community channel, "Tap Chat". This gives us feedback on how we're doing and how we can do even better. Tap Chat played a key role in the development of our PR19 plan.

Our communities

We're very aware of the central role we play in our community and know our customers want us to do more - to help improve the environment, to support education and give something back. Our employees dedicated over 2,000 days to volunteering during the year, many of which were supporting our Community Champions scheme. We're also doing more to engage with our customers of the future, for example through our Wonderful Water Tour - an innovative educational roadshow - which reached 130,000 young people over the last 12 months.

Looking ahead, we're going to do more to serve our communities by investing 1% of profits in community projects. Our hope is that our community dividend will benefit thousands of our customers, together with their communities, to make a positive difference to their everyday lives.

Our people

Our people are fundamental to the success of our business. We employ over 6,000 people and we're fortunate to have a team of dedicated, skilled individuals that serve our customers 24 hours a day, 365 days a year. We work very hard to ensure Severn Trent is an awesome place to work. We work hard to create a workplace which is welcoming and safe, where good work is well-rewarded and people are treated with respect.

We engage with our employees at every opportunity, helping them to progress and enjoy satisfying, rewarding careers. Our approach is yielding positive results and we've been honoured with a Glassdoor Employee's Choice Award, recognising the Best Places to Work in 2019, with Glassdoor reporting that 74% of our people would recommend us to a friend. In a year of intense activity we were pleased to maintain our strong engagement score following our

QUEST survey, with participation five points ahead of the UK and Ireland benchmark at 90%. QUEST results reported that 92% of our people say they're proud to work for us and 93% feel we trust them to do their job.

We believe passionately that nobody should be hurt or become unwell by what we do and are pleased that our health and safety performance is upper quartile in the sector. We did not experience any major safety incidents and no fatalities during the year. However, during the year we were disappointed to see an increase in Lost Time Incidents, mainly due to slips, trips and falls. We have detailed plans in place to address this, with new data analytics being used to identify specific areas for improvement.

We strive to create careers with purpose and meaning and we support the development of colleagues at every stage of their career journey. We're on track to deliver our Training Academy early in AMP 7. This will play a key role in ensuring our people have the right mind-set, technical competence

and leadership skills for now and the future.

As part of being an awesome place to work it is important that our people are properly rewarded. Our reward strategy is designed to support Severn Trent's purpose, vision and values and to reward all of our employees for delivering against our strategic objectives. Further information can be found in the Severn Trent Plc Directors' Remuneration report in the Severn Trent Plc Annual report and Accounts on the Plc website [severntrent.com](https://www.severntrent.com).

Our environment

We look after some of the UK's most impressive natural resources. We take great care to understand and control the impact we have on the environment in everything we do - when taking water from our rivers and reservoirs and when safely returning it back to the river in a clean state.

We are pleased with the progress we are making in partnership with landowners and farmers across our region to improve the ecology



of rivers in our region. Our industry leading Catchment management programme has yielded great results over the past year and demonstrates the power of strong collaborative working.

We're committed to creating thriving bird, insect and plant habitats in our region. We improved biodiversity on six hectares of Sites of Special Scientific Interest during the year, and we're on track to reach our target of 75 hectares by 2020. By 2025, we're aiming to work with organisations such as the Wildlife Trust to improve biodiversity on a further 1,015 hectares.

Our Annual performance summary on pages 31 to 57 explains, in more detail, how we have performed on our environmental performance commitments in the year.

In addition to our performance commitments we are looking to do more to maximise the benefits to the environment. As part of this we have committed to the triple carbon pledge of:

- Net zero carbon emissions by 2030
- 100% renewable energy use by 2030; and
- 100% electric vehicles, where available, by 2030.

Our suppliers and partners

Our suppliers and partners support us in delivering for those we serve. A core principle of our supplier contracts is that they sign up to our Sustainable Supply Chain charter and support our corporate social responsibility agenda. During the year 258 suppliers signed up to the charter and our supply chain undertook a variety of charitable environmental projects such as the Northshore Beach Walk Project at Draycote.

Our fast-track status has enabled us to make an early start on our preparations for AMP7 and in March 2019 we announced the first

contractors we will be working with to deliver our capital programme of over £2 billion. Over the next 12 months we will work with our new construction partners to define the key projects which we will deliver for our customers.

Our investors

We believe that a business driven by social purpose and sustainability aligns with the interests of investors over the long-term. Delivering against our customer, social, environment and financial commitments will yield financial outperformance which can be shared with all stakeholders, including investors through dividends and customers through lower bills and reinvestment.

As a listed company, our parent company, Severn Trent Plc, has a large shareholder base. This includes pension funds which are the caretakers of many of our customers' and employees' pension investments. Many of our employees are also shareholders through our employee Sharesave schemes.

Severn Trent Water Limited is the principle subsidiary of Severn Trent Plc and funds the majority of the dividend payable to the Group's shareholders. The Group has clearly stated its dividend policy to the end of AMP6 and this will be reviewed following the receipt of the Final Determination in December 2019. In forming this policy the Group balances the needs of our investors with the needs of our customers and other stakeholders.

We aim to maintain a flexible and sustainable balance sheet structure and to maintain an investment grade credit rating. At 31 March 2019 adjusted gearing was 62.3%, see table 1E.

Our long term credit ratings for the Severn Trent Water Group are:

Agency	Rating	Outlook
Moody's	A3	Negative
Standard and Poor's	BBB+	Stable

Our regulators

Our industry is regulated by Ofwat and a number of other regulators and public bodies. We work with our regulators to shape our industry.

As we mentioned above, we were delighted that Severn Trent Water was one of only three companies to be awarded fast-track status by Ofwat. This means we have clarity on the challenges and opportunities ahead. With our plan now agreed and commitments set, we are accelerating our preparations for the next AMP. We continue to work constructively with Ofwat ahead of our final determination in December 2019. Our Water Forum, including representatives from a number of our regulatory bodies, played a key role in supporting us developing our plan.

During the year we met the financial cap on our waste water performance commitments. Following consultation with our customers and discussion, Ofwat agreed to raise the cap and we accepted tougher targets on some of our waste measures for the remainder of the AMP. This will help deliver more progress earlier on the issues which matter to customers, this is explained in more detail on page 32. We have also agreed to share best practice with other water companies in England and Wales in order that all customers may benefit.

Our Board, governance and compliance

Providing robust governance, risk management and compliance led by our Board

1. About this section

This section sets out our Board structure, its vision and how we meet our statutory duties and obligations to our customers. In doing this we have considered Ofwat's objectives set out in its January 2019 publication 'Board leadership, transparency and governance - conclusions on revising the principles', its Company Monitoring Framework ('CMF'), and its Information Notices on Regulatory Accounting Guidelines for 2018/19 reporting.

Throughout this section we reference a number of different documents where you can find more detailed information on our policies, which are available on the Severn Trent Plc website. These include:

- Our group company structure
- Detailed information about the Severn Trent Plc Board, Severn Trent Water Limited Board and their respective terms of reference
- 'Doing the Right Thing' policy
- Matters Reserved policy
- Conflicts of Interest policy
- Remuneration policy
- Our Assurance summary, which can be found in appendix A.

Our Board's annual Risk and Compliance Statement as set out under licence condition J (levels of service) and Ofwat's CMF is included at the end of this section.

2. Board leadership, transparency and governance

Our Board is fully committed to Ofwat's principles for Board leadership, transparency and governance with its emphasis on the importance of strong Board leadership and the special responsibilities attached to regulated monopoly companies providing an essential public service. As such, our disclosures have been revised this year to fully articulate how we apply the principles and provide links to additional published information where relevant. As we have targeted ourselves against Ofwat's 2019 Board leadership principles, we believe we go above and beyond the original 2014 principles which are required for 2018/19 reporting.

Our purpose, values and culture

Our purpose is to serve our communities and build a lasting water legacy. This drives our vision to be the most trusted water Company by 2020, delivering an outstanding customer experience, best value service and environmental leadership. During the year we were delighted to see this commitment recognised when we were named as a pathfinder with the Purposeful Company Task Force - an initiative that seeks to transform British business with purposeful companies, committed to creating long-term value, through serving the needs of society. We are the only utility to receive this honour.

This understanding and recognition of social purpose has never been more important - our purpose connects us with our customers and communities, inspires our people and reinforces that in the long-term we all share the same interests. We believe that transforming our services and driving growth will lead to mutual benefit for all, with performance that delivers benefits to one group also delivering for others. The interests of our stakeholders are often interlinked, with many of our employees also being our customers.

You can read more in our 'explaining company performance and direction' section on pages 8-11 and also in our social purpose publication, which is available on the Severn Trent Plc website. This document, written in plain English, sets out what our social purpose is achieving for customers, the environment, and society as a whole as well as our colleagues.

Focus on culture

Our Board recognises the importance of its role in setting the tone for Severn Trent Water's culture and making sure that it is embedded throughout. Our code of conduct, 'Doing the Right Thing', sets out the clearly defined values and standards of behaviour that we expect from everyone who works for, and with, Severn Trent Water. These values embody the principles by which the Company operates, and provide a consistent framework for responsible business practices. The supporting policies codify how to identify and deal with suspected wrongdoing, fraud or malpractice;

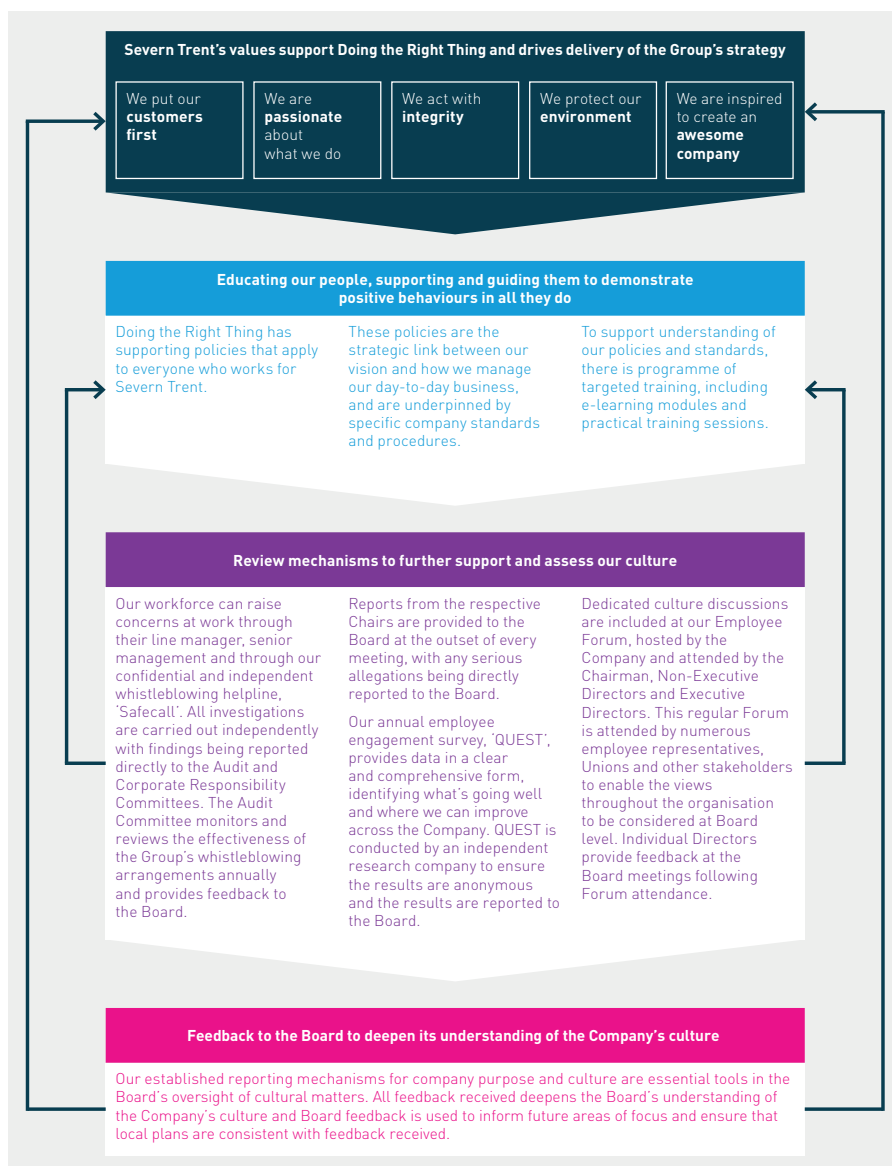
how to ensure that the highest standards of safety are maintained; and how to apply good ethics and sound judgment.

The Board is responsible for establishing Severn Trent Water's purpose, vision and strategy, and satisfying itself that its culture is aligned. Our purpose - to serve our communities and build a lasting water legacy - reflects 'why' we do what we do. Our strategy provides us with 'what' we do. But the 'how' we deliver our purpose and strategy is what differentiates us and that is driven by our culture, values and behaviours.

During the year, our Board spent time deepening its understanding of the Company's culture even further, through a dedicated Company purpose and culture session that focused on the results of the all employee survey 'QUEST' and other forms of employee engagement. Our Board considered the results of the survey and discussed the Company's approach to addressing areas of employee focus.

Additionally, our Board routinely interacts with employees as part of their site visit programme. These direct interactions with employees, specifically in relation to culture, allow our Board to understand first-hand the key issues identified by our workforce, and provide an opportunity to feedback specific insights.

Our Board continually monitors, assesses and reinforces our values and culture to satisfy itself that the behaviours throughout the business are aligned with the Company's purpose. Where misalignment is identified by our Board, appropriate corrective action is taken. Additional detail can be found in the Severn Trent Plc Annual Report and Accounts ('ARA') on the website.



Group structure

Severn Trent Water is the principal operating subsidiary of the FTSE 100 Company Severn Trent Plc, which means we operate at the high standards expected of a publically listed company. Severn Trent Plc also publishes its own ARA and a history of our dividend payments for Severn Trent Plc going back to 1990 is available on the Severn Trent Plc website. Severn Trent Plc's dividend policy is disclosed in its ARA to ensure clarity about how our investors are rewarded based on our performance through the Group's activities.

We believe we are prudent in how we manage financial risk and even-handed in the way we share the returns from our outperformance with customers and shareholders; we pay our taxes in full and on time; we pay dividends and Executive salaries that are reasonable and sustainable and linked to the delivery of outcomes to customers; and we avoid complex offshore financial vehicles.

The ownership structure of Severn Trent Water Limited within the Severn Trent Group can be found on our website.

A standalone regulated company and our Board structure

Our Board's role is to ensure the long term-success of Severn Trent Water. Maintaining the highest standards of governance is integral to the effective delivery of our strategy and ensuring that our Board take decisions that create sustainable long-term value for the mutual benefit of our shareholders, customers, employees and the communities we serve.

The operation of our Board is supported by the collective experience of the Directors and the diverse skills and experience they possess. Details of the experience of our Board can be found in the ARA on our website.

Our Board's collective experience enables it to reach decisions in a focused and balanced way, supported by independent thought and constructive debate between our Directors. Trust and mutual respect are the cornerstones of relationships between our Directors, with a Board dynamic that supports open and honest conversations to ensure decisions are taken for the benefit of the Company in full consideration of the impact on all stakeholders. Responsibility to all of our stakeholders for the approval and delivery of the Company's strategy and for creating and overseeing the framework to support its delivery sits with our Board.

Six members of our Board and Board Committees are independent Non-Executive Directors and there is a clear division of responsibilities between the roles of Chairman and CEO. To allow these responsibilities to be discharged effectively, our Chairman and CEO maintain regular dialogue outside the Boardroom, to ensure an effective flow of information.

The requirements of our Board are clearly documented in the Severn Trent Water Articles of Association, Schedule of Matters Reserved to the Board and Charter of Expectations.

Board appointments and induction

Any new appointments to our Board result from a formal, rigorous and transparent procedure, responsibility for which is delegated to the Plc Nominations Committee (although decisions on appointments are a matter reserved to our Board). Further information can be found in the Severn Trent Plc ARA.

We have an established induction programme in place which can be tailored to meet the requirements of individual Directors and includes the following elements/details:

- Ofwat pre-appointment process.
- Our business and how we are regulated, including performance.
- Our non-regulated business, including performance.
- Strategy.
- Key operations and processes including an immersive, practical journey through the water and waste cycles.
- Key stakeholder relationships.
- Customer delivery.
- Capital delivery and commercial.
- How the business is financed and financial performance.
- Our people and how we work, including health, safety and wellbeing, talent and succession, Trade Unions and an overview of our Remuneration policy.
- Risk and audit, including the risk profile and our approach to risk.
- Face-to-face meetings with key senior colleagues.
- Directors' duties.
- Governance matters and Company policies.

We continually enhance our Board's induction process, in full consideration of feedback from new appointees and the Board effectiveness evaluation.

Board effectiveness

The effectiveness of our Board is reviewed at least annually, and the 2018/19 evaluation was internally conducted by the Chairman with support from the Company Secretary through a series of one-to-one meetings in January and February 2019.

The evaluation concluded that our Board, its Plc Committee Chairs and Committees were effective and that all Directors were considered to have demonstrated considerable commitment and time to their roles, well in excess of that required by the Charter of Expectations notwithstanding any other positions held by them outside of Severn Trent Water.

The Board noted that PR19 approval and submission had been particularly well managed and that the use of additional Board Committee meetings and briefing papers had ensured that this topic had not distracted the Board from considering other strategic issues and operational performance oversight.

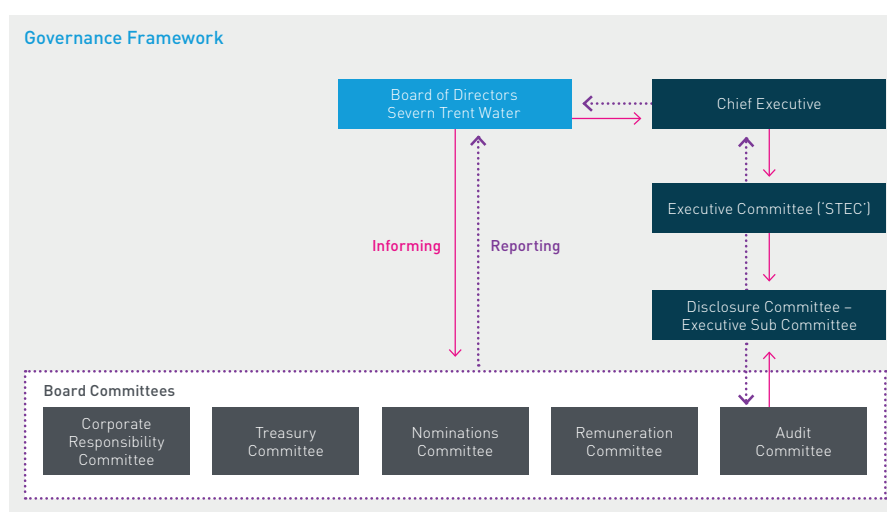
Board and Committee membership and meeting attendance

Details of Board and Board Committee membership, the number of meetings held and attendance can be found in our ARA.

Our Governance Framework

The Board is supported by the Severn Trent Plc Governance Framework, which is set out below. The Governance Framework comprises the Board, Executive Committee and their respective Committees.

In line with the 2016 UK Corporate Governance Code, the Board delegates certain roles and responsibilities to its various Committees. The Committees assist the Board by fulfilling their roles and responsibilities, focusing on their specific activities, reporting to the Board on decisions



and actions taken, and making any necessary recommendations to the Board in line with its Terms of Reference. The Board regularly reviews the Terms of Reference of each Committee. The Governance Framework is also subject to periodic review to ensure that it remains appropriate.

The Seven Trent Plc Disclosure Committee oversees the Group's reporting obligations under the Companies Act 2006, the UK Corporate Governance Code, the UKLA Listing Rules, Disclosure Guidance and Transparency Rules and the Company's annual and continuing regulatory reporting requirements, considering the materiality, accuracy, reliability and timeliness of information disclosed and assessment of assurance received.

Our Assurance Framework

To support our Governance Framework, we also have a well-established, rigorous and robust assurance and performance reporting framework. Our assurance plan for this financial year, 2018/19, continues the high standard processes we have developed and implemented in previous years for reporting our performance commitments in our ARA and Annual Performance Report ('APR').

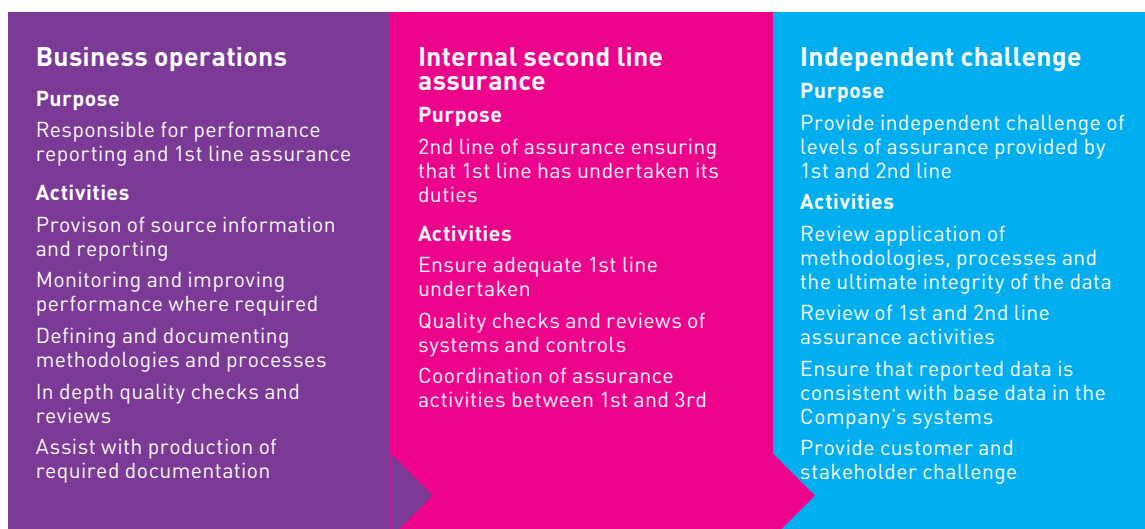
To ensure we're applying an effective programme of assurance,

while balancing value for money, we operate a three lines of assurance model. We target this model using a risk-based approach so areas that we know are of prime importance to customers, or may have a significant financial value or operational impact, receive the full three lines of assurance while other areas may be targeted with first or second line only. This approach ensures our spending on assurance is proportionate and aligns to what our customers' value most. The diagram on page 17 details the three lines and the typical activities for each.

We use a combination of assurance providers for third line activity. The majority of our assurance is provided by the following providers:

- Jacobs - typically review non-financial operational performance processes and data. Also responsible for cost allocation activities and financial reporting processes.
- Black & Veatch - review non-financial operational performance processes and data in respect of the Chester area.
- Internal Audit - used for ad-hoc activity and data audits.

We use this model for our regulatory returns so that we, and our customers, have a level of assurance that our submissions have been well prepared - consistent with our robust internal



processes. These processes are outlined below and the outcome of the assurance is set out in our assurance summary in appendix A.

Overall accountability for the preparation and production of the APR (which includes reporting of performance against performance commitments and associated Outcome Delivery Incentives ('ODIs')) rests with the Chief Financial Officer. The outcome of the assurance undertaken is reviewed by the Severn Trent Plc Audit Committee (the 'Audit Committee') on behalf of the Severn Trent Plc Board.

Internal Audit and internal controls

Internal Audit is an independent assurance function available to the Board, Audit Committee and all levels of management. The Internal Audit function is supported by two main co-sourcing partners, PricewaterhouseCoopers and Ernst & Young. The arrangement is reviewed annually and the Committee believes this structure adds value, through greater access to specific areas of expertise, increased ability to flex resources, and the ability to challenge management independently.

The role of Internal Audit is to provide assurance that the Group's risk management and internal control systems are well designed and operate effectively and that

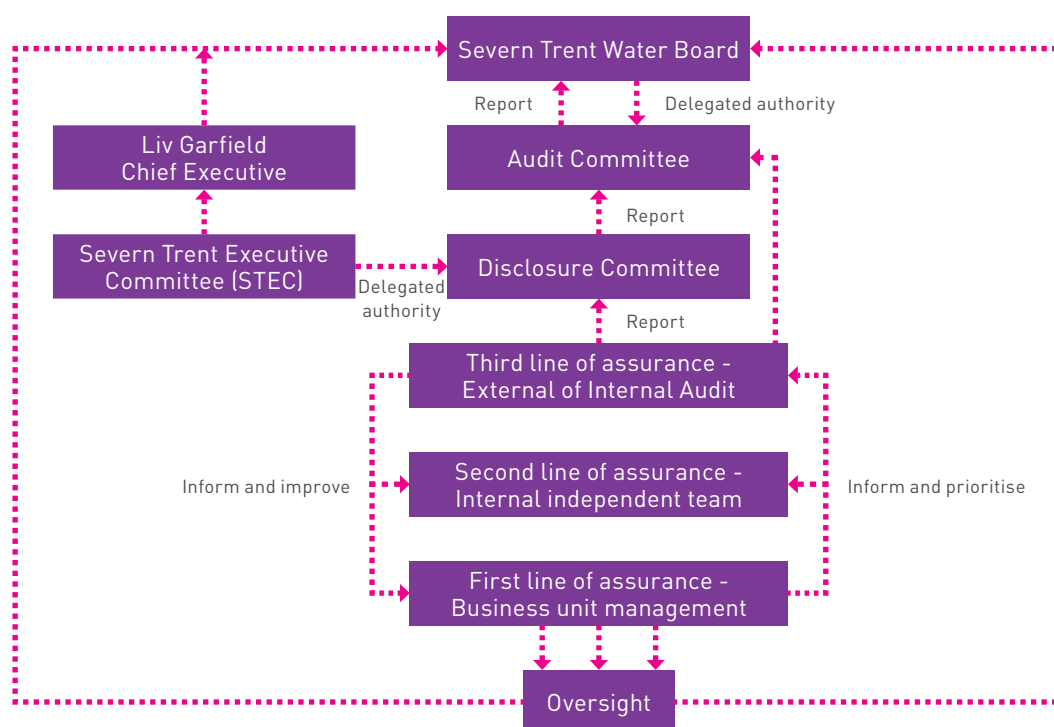
any corrective action is taken in a timely manner. The Head of Internal Audit is invited to attend all Audit Committee meetings. Each year, Internal Audit develops an annual risk-based audit plan for approval by the Audit Committee and performance dashboards to enable onward monitoring of the plan's execution. The Audit Committee challenges the audit plan, specifically whether the key risk areas identified as part of the Enterprise Risk Management ('ERM') process are being audited with appropriate frequency and depth, and also by bringing an external view of risks the Company may be exposed to. The performance dashboards summarise the performance of the Internal Audit function over the year against key measures and are reviewed by the Audit Committee twice a year. Following the completion of each planned audit, the Internal Audit function seeks feedback from management which is reported through the performance dashboards and assessed in turn by the Audit Committee twice a year.

An external review of the effectiveness of Internal Audit was carried out in January 2019. The review, performed by BDO Global, concluded that the Internal Audit function is fit for purpose, is operating efficiently and effectively and in line with good practice.

The effectiveness of the controls over financial reporting is also monitored by the Audit Committee, which receives regular reports of the testing conducted by the External Auditor. The Audit Committee is confident that, where any failings or weaknesses are identified in the course of its review of internal control systems, management puts in place robust actions to address these on a timely basis. An internal control system can provide only reasonable and not absolute assurance against material misstatement or loss, as it is designed to manage rather than eliminate the risk of failure to achieve business objectives.

Management of Conflicts of Interest

Severn Trent Plc has a Conflicts of Interest policy in place for all Group companies, including Severn Trent Water. Our Board considers potential conflicts at the outset of every meeting and formally reviews the authorisation of any potential conflicts of interest every six months. Additionally, the Audit Committee conduct an annual review of individual Director conflict authorisations as recorded in our Conflicts of Interest Register. The Conflicts of Interest Register sets out any actual or potential conflict of interest situations which a Director has disclosed to the Board in line with their statutory duties and the practical



steps that are to be taken to avoid conflict situations. When reviewing conflict authorisations, the Audit Committee considers any other appointments held by the Director as well as the findings of the Board effectiveness evaluation.

The policy continues to be applied practically throughout the year, for example in considering the potential conflict presented by Directors having roles on other Group companies. For example, in September 2018 modifications were made to the Severn Trent Audit Committee meeting structure to facilitate dedicated Committee focus for Hafren Dyfrdwy regulatory matters and remove a potential conflict of interest scenario in relation to John Coghlan who is a Director of both Severn Trent Water Limited and Hafren Dyfrdwy.

To facilitate effective governance, the Boards of Severn Trent Plc and Severn Trent Water Limited are run concurrently as Severn Trent Water Limited comprises a very substantial majority of the Group's business activities. As such, it is less likely that Directors will face decisions that will conflict with

the obligations of the particular Company on whose Board they sit. Nevertheless, this matter is subject to review at every meeting of each Board and in the event the position changes, robust mitigations will be implemented.

3. Monitoring performance and compliance

Performance

Our performance commitments matter to our customers and to us. Our Board is fully engaged in monitoring and assessing the quality of our performance and providing challenge through our established governance arrangements which will continue into 2020 and beyond to ensure delivery of our PR19 performance commitments. Performance is reported to and reviewed monthly by the Executive Committee and at every Board, and through the Plc Disclosure Committee and Plc Audit Committee at least twice at mid-year and year end points in the reporting cycle.

Compliance

The statutory and regulatory obligations relevant to our functions as a water and sewerage undertaker are primarily set down in the Water Industry Act 1991 and our Instrument of Appointment (the 'licence'). The licence also requires us to perform duties imposed under other statutory and regulatory obligations as necessary to fully discharge our duties as a water and sewerage undertaker. Our approach to achieving compliance with our statutory and regulatory obligations is based on establishing sound governance and systems of internal controls. We set ourselves high standards, though it is important to understand that such systems cannot provide absolute guarantees.

In 2015, at the start of this business plan period, we introduced a new compliance framework to provide a robust process to set high levels of compliance backed up by rigorous assurance. We continue to refresh and build on this process every year. Our group compliance

and assurance team, oversees this framework and ensures that managers across the Company are aware of their statutory and regulatory obligations. Responsibility for compliance with specific licence conditions and obligations are assigned to individual senior leaders within Severn Trent Water relevant to their areas of responsibility. This includes the development, implementation and testing of controls to ensure compliance in areas such as policy and standards, procedures, supervision, training, and management information. An annual process of self-certification takes place to inform this compliance statement, which is called licence to operate and is set out in our Assurance summary in appendix A.

In order to comply with the requirements of the Regulatory Accounting Guidelines 5.07 ('RAG 5'), we operate a compliance framework with established processes including; risk assessment and associated controls, guidance and policy documents, maintaining a transaction register, and cost allocation assurance; and includes senior management sign-off against the requirements of RAG 5 via our licence to operate framework. During 2018/19 we have added further controls and governance by establishing a Steering Committee responsible for overseeing RAG 5 compliance and reporting directly to the Disclosure Committee. In addition we have established a RAG 5 working group reporting directly to the Steering Committee, ensuring that any improvement actions are undertaken at an operational level.

As part of the licence to operate framework, our Board has reviewed and considered any potential departures from our statutory and regulatory obligations. Departures are set out at the end of this section on page 25.

4. Risk management

Risk is all about uncertainty which, we recognise, can manifest itself as both negative and positive impacts. Our goal is to minimise the threats and maximise the opportunities for the benefit of our customers, shareholders, employees, supply partners and the environment.

Our Board has overall accountability for ensuring that risk is effectively managed across the Company. The Board's mandate includes defining risk appetite and monitoring risk exposure to ensure significant risks are aligned with the overall strategy of the Company. On behalf of the Board, the Audit Committee assesses the effectiveness of the ERM process and internal controls to identify, assess, mitigate and manage risk. The Executive Committee reviews strategic objectives and assesses the level of risk taken in achieving these objectives. This 'top down' risk process helps to ensure the 'bottom up' ERM process, described below, is aligned to current strategy and objectives. The management of risk is embedded in our everyday business activities. We manage risks within the overall Governance Framework which includes clear accountabilities, delegated authority limits and reward policies. These are designed to provide employees with a holistic view of effective risk management.

Our approach to risk reflects our status as a regulated utility providing essential services and operating as part of the Critical National Infrastructure for the UK. The nature of the business is such that there are some significant inherent risks. We have a strong control framework in place to enable us to understand and manage these risks in accordance with our risk tolerance and appetite.

We use an established ERM process to assess and manage our significant risks. The process is controlled by the central ERM team and underpinned by standardised tools and methodology to ensure consistency. ERM Champions and co-ordinators operate throughout the business, with support and challenge from the ERM team, continually identifying and assessing risks in their business units and reporting on a quarterly basis. Criteria are used to consider the likelihood of occurrence and potential financial and reputational impacts. The potential causes and subsequent impact of the risks are documented to enable mitigating controls to be assessed. This assessment allows us to put in place effective strategies to remediate defective controls or implement additional controls. Business units' information is combined to form a consolidated view of risk - with risks being prioritised. Our significant risks form our risk profile which is reported to the Executive Committee for review and challenge. This is reported to the Audit Committee and Board half-yearly. The report provides an assessment of the effectiveness of controls over each risk and an action plan to improve controls where necessary.

To further enhance our ERM information, we report 'risk flightpaths'. These demonstrate the level of risk the Company faces and the timeline for the key risk mitigation steps to manage the risk to the target position. The flightpaths help to facilitate a more thorough review of the target risk positions, consider risk appetite and assess whether actions are on target with the correct prioritisation in place. In addition, individual risks and specific risk topics are also discussed by the Board during the year.

Risk appetite

The Board keeps the relationship between our strategic ambitions and the management of risk under continual review. The ERM process establishes target risk positions for each of our significant risks. The Board formally discusses the progress towards this position and the mitigating actions being undertaken every six months.

Our principal risks

The directors have carried out a robust assessment of the principal risks facing the Company, including those that would threaten its business model, future performance, solvency or liquidity. These have been categorised across:

- Customer perception.
- Legal, regulatory and environment.
- Operations, assets and people.
- Financial risks.

The principal risks, what they mean for us and what we are doing to manage them are set out on pages 50-63 of our ARA.

5. Customer expectations and stakeholder engagement

We recognise the importance of our commitment to delivering outcomes that reflect our customers' views and environmental needs.

Our customer ODIs provide a transparent mechanism by which we can demonstrate to our customers whether the performance they have received from us is subject to a reward or penalty. We believe our customer ODIs provide strong incentives for us to innovate and become more efficient, protecting our customers against instances of under-delivery and, where merited, rewarding us for outperformance in areas where customers are willing to pay more to receive more of what they want.

Over the past two years we have carried out our most extensive customer engagement programme ever to co-create our PR19 plan, as well as continuing to track customer sentiment through our quarterly customer tracker. Our Customer Challenge Group, the Water Forum, has continued to play a vital role in challenging our customer engagement and reflecting the views of our customers.

In addition to our established 'business as usual' engagement with our regulators, investors, customers and other stakeholders, we undertook focus groups and targeted research to understand our customer views on our plans for assurance, which included:

- Three face to face focus groups with customers impacted by the change between Severn Trent Water and Hafren Dyfrdwy (Chester, Wrexham and Powys), and;
- Online surveying through our 'Tap Chat' tool.

Throughout the year we have continued to work with the Water Forum, to demonstrate how we are delivering on our ODIs and how we are assuring them. We have discussed our year end performance and customer ODI results with the Water Forum - including the amount of reward/penalty we propose to recover through our customers' charges.

From an external stakeholder perspective, we have continued to share our operational performance with the Consumer Council for Water ('CCWater') on a quarterly basis and consult with external stakeholders on our assurance plans to ensure we receive appropriate levels of customer challenge and scrutiny. This year we added a 'regulatory library' to our website to ensure all our regulatory submissions could be viewed in one place with a prominent link displayed at the top of the homepage. Our communications and customer research teams are continuing to improve the way we share our regulatory reporting information in a transparent way that is accessible and engaging to our customers.

Delivering for customers and stakeholders - board engagement

Our Board recognises the importance of considering all stakeholders in its decision-making, as set out in section 172 of the Companies Act, and the positive impact this has in promoting the success of the Company as a whole. Severn Trent's success also depends on the Board taking decisions that deliver mutual benefit to our customers, communities and other stakeholders. The table below sets out details of key stakeholder engagement undertaken by the Board during the year.

Board Engagement and Activities

Customers



- Customer-shareholders had the opportunity to meet the Board at our AGM and ask questions.
- Customer Delivery Performance Report tabled at every Board meeting.
- Extensive customer research considered regularly by the Board in relation to the PR19 plan and submission.
- Board attended some of our PR19 customer research sessions.

Communities



- Employees who live and work in our communities meet the Board at the Employee Forum, AGM and site/operational visits.
- Corporate Responsibility reports regularly discussed at Board meetings, including an update on community activities.
- Board received updates on the Group's volunteering programme during the year.
- Board consideration of the community dividend, developed to fund projects in our community.
- Immersive Board session on the 'Wonderful Water Tour' – our new innovative educational tour to inspire and educate children in our communities.
- Volunteering update considered by the Board.
- Board site visit to Lake Vyrnwy Reservoir and Visitor Experience Site.

Employees



- Employee-shareholders had the opportunity to meet the Board at our AGM and ask questions.
- CEO Employee roadshows and senior leader events.
- Board attended a Company Purpose and Culture session with employee representation and discussion of the QUEST survey results.
- Board meetings held at a variety of sites, including operational sites. Directors met a number of employees at these events.
- Board site visits outside of the Board meeting calendar, where Directors met employees and discussed matters with them.
- Chairman, Non-Executive Director and Executive Director attendance at the Employee Forum, including an opportunity to meet employees across the Group. Individual Directors provide feedback to the Board following Forum attendance.
- Internal blogs by Executive Directors.
- Regular senior leader engagement with Executive Directors.
- Talent development considered by the Board.
- Dedicated People Strategy discussion at Board Strategy day.

Regulators/
Government

- Renationalisation reports considered by the Board.
- Regulatory matters regularly considered at Board meetings, including PR19, Water Resources Management Plan and Scheme of Wholesale Charges.
- Regulatory stakeholder attendance at Board meetings during the year.
- Chairman met with Jonson Cox, Ofwat.
- Engagement with DWI lead inspector, EA, CCW and the Pension Trustees for the Company's defined benefit pension schemes.
- Regulatory consultation updates provided to the Board, including Severn Trent's proposed response.

Suppliers/
Contractors

- Commercial Performance Report tabled at every Board meeting, including an update on relationships with suppliers and associated performance.
- Chairman and Executive Director attendance at the Employee Forum, including attendance by suppliers.

Statement from non-financial assurer - Jacobs

Independent Technical Assurance Statement - SVE

To the Severn Trent Water Limited Board

Jacobs has been appointed by Severn Trent Water (SVE) to provide independent technical assurance of the data that feeds into their regulatory submissions. For the Annual Performance Report 2019 (APR19) submission we were asked to review the 2018/19 Legacy Severn Trent Water Performance Commitments, AMP7 common Performance Commitments and non-financial section 4 data on a risk-based approach.

Through a series of meetings and information exchanges, we have reviewed and tested the methodologies and processes on which the relevant statements in the APR19 are based, and we have considered the material accuracy of the performance data presented. Our findings have been discussed with management and the ST Plc Audit Committee.

On the basis of our audit work, we are satisfied that the information we reviewed within and which supports the APR19 has been assembled using appropriate methodologies and processes and that the data provides a reliable representation of Company performance. There is also good evidence of engagement from the teams involved in producing the performance data and of governance and programme management. We note that the Board has included issues we noted during our review in its declared departures from compliance in its statement.

Yours sincerely

Alexandra Martin

Divisional Director

Statement from non-financial assurer - Black & Veatch

Annual Performance Review 2019 Independent Technical Assurance Statement

Black & Veatch Ltd has been appointed to provide, among other things, independent technical assurance of information reported in the Annual Performance Report for 2019 (APR19). Our assurance covered only the Chester area of the company and was limited to checks on performance reported against selected annual Performance Commitments and against Ofwat Convergence requirements for Leakage, Interruptions to Supply and Per-Capita Consumption.

To provide this assurance we met the members of company staff responsible for collecting and analysing the relevant data and calculating the reported measures. We checked that appropriate procedures were in place and were followed. We followed the audit trail from the figures reported in the APR19 to base data in company systems and confirmed by means of sample checks that these were consistent. We considered the material accuracy of the statements made by the company in its report and checked for material deviations from established procedure. We have provided the company with detailed findings under separate cover.

From our assurance work we are satisfied that for the topics we covered, the information reported in and supporting the APR19 was compiled using appropriate data and methodologies and provides a realistic representation of actual company performance. We identified no material weaknesses or deviations from established procedure.

In our opinion, the company's framework of three lines of assurance provides a good level of confidence that assurance is robust and governance in place. The reporting process and the information for reporting are scrutinized and approved by the Audit Committee and performance is reviewed by the Board.

Stephen Bentley,

Independent Technical Assuror
Black & Veatch

Risk and Compliance Statement

Having taken into consideration the information above, our Board approves the Annual Performance Report ('APR'), the associated APR data tables, and the noted departures, including the detail for unplanned outages.

The Board confirms that:

- We have a full understanding of and we comply with our statutory, licence and regulatory obligations in all material respects except where indicated on page 25.
- We have taken appropriate steps to understand and meet customer expectations.
- We have sufficient processes and internal systems of control to fully meet our obligations.
- We have appropriate systems and processes in place to identify, manage, mitigate and review our risks.
- We have reviewed our governance to ensure the regulated Company maintains the principles as if it is a separate public listed Company.

Signed for and on behalf of the Board



Liv Garfield
Chief Executive
Severn Trent Water Limited



Andrew Duff
Chairman
Severn Trent Water Limited



John Coghlan
Chairman - Audit Committee
Severn Trent Plc

9 July 2019

Departures from the statement

Description of duty/obligation	Purpose of duty/obligations	Disclosure	Customer Impact	Action Taken
Asset stewardship: Mains bursts	2015-2020 Performance Commitment	During a review of our burst performance, we identified some operational work was incorrectly coded in our systems, resulting in an under-reported number of bursts.	For APR19, we made the corrections during the year and our APR reflects the correctly coded bursts position. This has resulted in a small change to our historic number of reported bursts, however, there is no impact on the customer ODI reward/penalty position.	Jacobs reviewed the APR19 process and data following the corrections as part of its year end assurance activities, as outlined in our Assurance summary at appendix A. The same process was followed to check and correct prior year data. We have updated our documentation to reflect the new process.
Customers at risk of low pressure	2015-2020 Performance Commitment	During a review of our low pressure performance, we identified that two areas of the business used different methodologies to establish low pressure incidents.	For APR19, we made the corrections in the year and our APR reflects the consistent application of the guidance. Having reviewed prior AMP6 reporting we found that although the change to our historic performance is small, there is an impact on the level of financial reward we should have received. We are repaying the financial reward claimed on the incorrect data as set out on page 46-47.	Jacobs reviewed the APR19 process and data following the corrections as part of its year end assurance activities, as outlined in our Assurance summary at appendix A. The same process was followed to check and correct prior year data. We have updated our documentation to reflect the new process.
Table 2F - Household billable properties Table 4A - Household voids	Customer property information	Through our APR19 year end assurance checks, and in response to a PR19 query we identified some errors in our customer property data as follows: <ul style="list-style-type: none"> In APR17 and APR18, Table 2F overstated unmeasured waste only properties by approximately 70,000. In APR17, Table 4A understated unmeasured voids by approximately 31,000 and overstated measured voids by 3,400. In APR18, Table 4A understated unmeasured voids by approximately 70,000 and measured voids by 3,100. 	For APR19, we made the corrections in the year and our APR reflects the consistent application of guidance. There is no financial ODI impact, for transparency, we have included the restated numbers for previous years in our PR14 reconciliation tables, which we submit alongside our APR.	For APR19 we conducted additional first and second line checks. Following identification of the error in our APR19 assurance checks of Table 2F (Household billable properties), we conducted a review of all our historic property number reporting over the last AMP to ensure we had accurately reported Tables 2F, 4A, 4Q and 4U. Going forward, we have identified how we will improve our business information reporting processes to improve the accuracy of our information. We have also provided bespoke training to the team responsible for producing this data.
Unplanned outages	Shadow convergence Measure	Last year we identified that a programme of work was required to meet full compliance against the new Unplanned outages convergence measure. While we have made significant progress, we highlighted in our May 2019 submission that we have further work to do to reach full compliance ahead of AMP7, in particular on our ability to report a planned outage figure.	As this is a shadow reporting measure that takes effect in AMP7, there is no customer impact this year. We are working hard to ensure we are fully compliant before the start of the next AMP.	We have already implemented the key components of our plan to achieve full compliance and are confident that we will address the remaining issues ahead of AMP7. Jacobs have provided assurance on our progress and our plans to reach full compliance. This report was submitted to Ofwat in May 2019. Jacobs will continue to provide assurance over the coming year.

Where appropriate, the persons involved and the geographical area impacted has been highlighted for each departure.

Regulatory Statements

Regulatory statements

The following section contains the statements required by the terms of our licence conditions and the statutory requirements set out in the Water Industry Act 1991 and where required is endorsed and signed by our Board. See also our Board's Risk and Compliance Statement on page 24.

1. Disclosures required by RAG 3

a. Link between Directors' pay and standards of performance

Our remuneration policy is aligned to our purpose, vision and strategy thereby incentivising great customer service and the creation of long-term value for all of our stakeholders.

All Directors of Severn Trent Water Limited are also Directors of Severn Trent Plc and further details of their remuneration and how their performance measures are linked to our business strategy can be found in Severn Trent Plc ARA. The policy is summarised below:

i) Non-executive Directors

The Chairman and Non-executive Directors do not participate in the Company's incentive arrangements (i.e. annual bonus or share schemes) and were paid no remuneration other than their respective Directors' fees. Details can be found in the Severn Trent Plc ARA.

ii) Executive Directors

Through the annual bonus and long term incentive plan (LTIP), Executive Directors receive remuneration linked to the achievement of performance measures. The 2018/19 bonus was based upon five main components:

- Underlying operating profit.
- Customer ODIs.
- Customer service in the year (measured through % reduction in written complaints).
- Health and Safety (measured through number of lost time incidents).
- Personal objectives.

Half of the annual bonus is delivered as cash, and the balance is deferred into shares for a further three years. The LTIP outcomes are measured over a three year period, and are based on a single performance measure, Return on Regulatory Equity ('RoRE'). LTIP awards with a performance period beginning after 1 April 2018, are subject to an additional stretch target of upper quartile RoRE.

In determining the outcome of the incentive schemes, standards of performance are assessed by the Severn Trent Plc Remuneration Committee to ascertain whether targets have been achieved. In addition, the Committee also considers relevant reports from Ofwat in assessing the

achievement of standards of performance. We operate a unified remuneration structure at the Severn Trent Group level across the two regulated businesses (Severn Trent Water and Hafren Dyfrdwy).

b. Disclosure of information to auditor

The Companies Act requires Directors to make a statement in the Company's ARA regarding the provision of information to the auditor. RAG 3 requires an equivalent statement to also be made in the APR. This statement is set out below.

So far as each of the Directors are aware, there is no relevant audit information of which the Company's auditor is unaware; and each of the Directors has taken all the steps that he/she ought to have taken as a Director in order to make himself/herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

c. Governance and dividend policy

As a subsidiary of a FTSE 100 listed Company, Severn Trent Water has chosen to apply the principles of the April 2016 version of the UK Corporate Governance Code (the 'Code') to its governance arrangements where appropriate and reasonably practicable. These are the same principles that apply to listed companies. Details of how the Company has applied the Code during the year are set out in the Company's ARA, which is available on the Company's website (stwater.co.uk).

The Company's dividend policy is to declare dividends which are consistent with the Company's regulatory obligations and at a level which is decided each year after consideration of a number of factors, including customer service, regulatory uncertainty, ODI rewards or penalties, actual and potential efficiencies, future cash flow requirements and balance sheet considerations.

The amount declared is expected to vary each year as the impact of factors changes. The ordinary dividend declared and paid by the Company in 2018/19 amounted to £225.1 million (2018: £204.0 million), being 22.5 pence per share (2018: 20.4 pence per share).

d. Long term viability statement

The Directors' full assessment of financial viability can be found in the Severn Trent Water Limited ARA on pages 64-68.

The Directors have assessed the viability of the Company over a seven year period to March 2026, taking into account the Company's current position and principal risks. Based on that assessment, the Directors have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the period to 31 March 2026.

e. Statement of Directors' responsibilities (Condition F)

The Directors are responsible for the preparation of the APR and for its fair presentation in accordance with the basis of preparation and accounting policies.

Further to the requirements of Company law, the Directors are required to prepare financial statements which comply with the requirements of Condition F of the Instrument of Appointment of the Company as a water and sewerage undertaker under the Water Industry Act 1991 and Regulatory Accounting Guidelines issued by the Water Services Regulation Authority. This additionally requires the Directors to:

- i) Confirm that, in their opinion, the Company has sufficient financial and management resources for the next twelve months;
- ii) Confirm that, in their opinion, the Company has sufficient rights and assets which would enable a special administrator to manage the affairs, business and property of the Company;
- iii) Report to the Water Services Regulation Authority changes in the Company's activities which may be material in relation to the Company's ability to finance its regulated activities;

- iv) Undertake transactions entered into by the appointed business, with or for the benefit of associated companies or other businesses or activities of the appointed business, at arm's length; and
- v) Keep proper accounting records which comply with Condition F and the Regulatory Accounting Guidelines.

f. Tax strategy for the appointed business

We are committed to managing our tax affairs in a responsible manner. This means paying the right amount of tax at the right time in compliance with UK tax rules and acting in accordance with the values set out in our corporate responsibility framework.

References to 'tax' include taxes that we incur (corporation tax, business rates, employer's NIC, VAT and various environmental taxes) as well as taxes that we administer and collect on HMRC's behalf (PAYE and employee's NIC).

Our approach to tax

Our approach to tax is overseen by the Severn Trent Plc Board and is governed by the following key principles:

- We will manage our tax affairs responsibly, in a manner consistent with our vision to be the most trusted water company by 2020;
- We will not undertake aggressive tax planning or any planning not in support of business requirements;
- We will make use of widely claimed incentives that the Government has chosen to make available to encourage investment; and
- We will maintain an open, transparent and collaborative relationship with HMRC consistent with maintaining our good working relationship.

The effective management of our tax affairs is in the best interests of customers as it helps to keep our bills as low as possible.

Tax governance

Responsibility for tax governance sits with the Chief Financial Officer, with oversight from the Board and the Severn Trent Plc Audit Committee and day-to-day support from a team of qualified in-house tax professionals.

In accordance with Group risk management procedures, tax risks are recorded and monitored throughout the year. If a material uncertainty is identified, external advice may be sought to ensure that our interpretation of the relevant UK tax rules is appropriate. We may also seek to resolve an uncertain tax position directly with HMRC before a tax return is filed, in accordance with HMRC's framework for co-operative compliance.

Any significant tax risk is reported to, and overseen by, the Severn Trent Plc Audit Committee, who also receive tax status updates as part of the interim and year-end financial reporting programmes.

Relationship with HMRC

In maintaining a good working relationship with HMRC, we seek to ensure that HMRC are kept up to date with business developments, including any commercial transactions with potentially significant tax implications. Where queries arise, these are managed on the basis of full disclosure.

We will make representations to, and consult with, HMRC on issues that could adversely affect investment in UK infrastructure or our customers' bills.

Non-UK operations

All of the Company's and its subsidiaries' revenues and profits are generated in the UK and are subject to UK tax.

Tax transparency

We are supportive of measures aimed at enhancing tax transparency and are committed to providing information on our tax affairs in a clear and straightforward way that enhances our stakeholders' understanding and provides confidence that we are paying our fair share of tax.

Scope

This Tax Strategy covers the period ended 31 March 2019 and applies to Severn Trent Water Limited and its UK subsidiary undertakings. It is published in compliance with the requirement at Paragraph 16(2) of Schedule 19 of Finance Act 2016 for large businesses to publish their tax strategy.

2. Ring Fencing Certificate (Condition K and P)

Licence conditions K (disposals of land) and P (ring fencing) require the Company, at all times, to ensure that if a special administrator were appointed to manage the regulated activities, that administrator would have sufficient control over the regulated business and assets to be able to do so. In addition to the statement set out above under licence condition F and the Regulatory Accounting Guidelines, the Company is required to confirm that it is in compliance with these conditions and make suitable sufficiency statements to that effect. This statement is set out here.

In accordance with the requirements of the Water Services Regulation Authority, our Board confirmed that, as at 31 March 2019:

- i) In the opinion of the Directors, the Appointee will have available to it sufficient financial resources and facilities to enable it to carry out, for at least the next 12 months, the Regulated Activity (including the investment programme necessary to fulfil the Appointee's obligations under the Appointment); and
- ii) In the opinion of the Directors, the Appointee will for at least the next 12 months, have available to it management resources which are sufficient to enable it to carry out those functions.



Liv Garfield
Chief Executive
Severn Trent Water Limited



Andrew Duff
Chairman
Severn Trent Water Limited



John Coghlan
Chairman - Audit Committee
Severn Trent Plc

For and on behalf of the board
9 July 2019

Annual performance summary

Performance Commentary

We've summarised our 56 performance commitments into eight areas to make it easier for customers and stakeholders to understand our overall performance so they can hold us to account. Each area is unpacked in this section.

An overview of our performance:

Service now - Waste £3.3m (£66.6m capped)	Asset health (£3.7m)	Resilience £0.0m	Environment £11.7m
Service now - Water (£14.6m)	Service now - Retail SIM TBC by Ofwat	Serving our community	Responsible, efficient investment

Clear and transparent reporting

It's important that our customers, stakeholders and regulators can trust the information we report; they need to be confident that they can trust us to act responsibly and always in our customers' best interests. This is particularly important where we have identified issues with data previously reported and need to restate our position. Where this impacts on ODI (Outcome Delivery Incentive) outperformance previously claimed we need to be clear and transparent about the changes we have made.

Customer Challenge Group

We have discussed our performance with our independent Customer Challenge Group, the Water Forum. We will include their independent view of our performance in our customer summary of the APR published later this summer.

Accounting for the boundary change and waste water uncapping

During the report year our company boundary changed. On 1 July 2018 our waste water customers in Powys and Monmouthshire transferred to Hafren Dyfrdwy. At the same time water only

customers in Chester moved from Dee Valley Water to Severn Trent Water. To ensure customers are protected we agreed area specific targets with Ofwat in line with the original commitments agreed with customers for the 2015-20 period.

During the year we also hit the overall outperformance cap for our waste water ODIs. We agreed with Ofwat, in December 2018, to reset our targets for three measures (internal and external sewer flooding and Category 3 pollution incidents) from 1 January 2019. Ofwat also agreed to extend the cap to allow further outperformance where we exceeded these more stretching targets. For these three measures we have revised the target twice within the same year compared to the original Financial Determination ('FD').

Reporting within the APR has therefore become more complicated. Our aim has been to keep it as simple and transparent as possible for our customers and stakeholders, whilst giving our regulators the assurance that we have calculated our performance and ODI values accurately and in line with the agreed targets. As such, we have continued to report a single value for each performance commitment against the combined target for the full year, and calculated the ODIs based on this performance ensuring, at all times,

we act in customers best interests.

To ensure our approach was robust, we met with Ofwat and discussed our proposal in detail before ensuring our independent, technical assurance partners reviewed our methodology and approach.

All historic performance data within this report aligns to the company structure at the time it was originally reported. We have not sought to back calculate targets or actual performance as we consider this would be less transparent for our customers.

Restating low pressure

This year we identified a potential inconsistency with how historic low pressure data was reported; we have reviewed our reported performance for AMP6, where we could not confirm that a property had been removed from the register based on the more stringent analysis being carried out, we have restated our performance to include these properties as 'at risk.' As such we have restated our low pressure values for 2015/16, 2016/17 and 2017/18 and made commensurate adjustments to the ODI value for this measure to take account of this.

We explain this issue in more detail on page 47.

Service Now - Waste

Our waste water performance has been our standout success of this AMP. To recognise this we agreed with Ofwat to lock in these improvements for our customers by resetting our targets from 1 January 2019. This is great as it ensures that we're now judged against our best ever levels of service, meaning that any deterioration will return money to our customers through underperformance penalties. Customers across the country will also benefit from our success as we've been asked by Ofwat to share best practice. We've outperformed both our flooding measures and Category 3 pollutions target this year, but recognise we have lessons to learn on other pollution events.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
SA1	Internal sewer flooding incidents	Number	662 (960)	725 (868)	(£1.006m) ¹
SA2	External sewer flooding incidents	Number	3,763 (7,447)	3,766 (6,455)	£3.757m
SC2	The number of Category 3 pollution incidents ²	Incidents	327 (374)	328 369	£0.468m
SC6	Serious pollution incidents ²	Incidents	2 (4)	7 (2)	NIL Non-financial
SC8	The number of Category 4 pollution incidents ²	Incidents	157 (182)	217 (176)	NIL Non-financial
SB1	Customers rating our services as good value for money	Percentage	59 (52)	63 (53)	£0.124m

Notes:

1. Internal sewer flooding is reporting a penalty position as we underperformed in the fourth quarter against the revised target agreed with Ofwat. Outperformance earlier in the year was subjected to the overall ODI cap.
2. Many pollution incidents have an immediate impact and similar causes as flooding incidents. We've recognised this by moving these commitments from Environment to Service Now - Waste water.

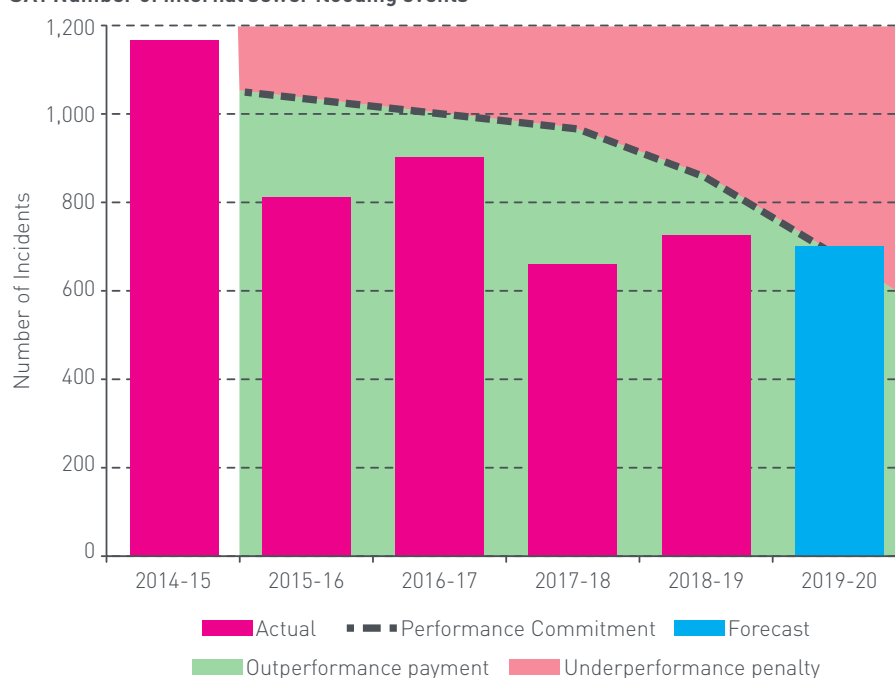
Sewer Flooding (Internal and External)

This year we have locked in the great improvements we've made over recent years by agreeing even tighter targets with Ofwat. This means our customers will see even greater benefits as we continue to drive improvements.

Drivers of performance

We've shown that the way we combine multiple data sources, analytics and our focus on driving performance can deliver a significant step change in performance. This year we have sought to refine and learn more about these approaches as we embed them across our waste water services.

SA1 Number of internal sewer flooding events



Our cluster analysis and prevention of repeat incidents has continued to be our key success story. By using the information available to us we are able to better understand customers who are at an increased risk of sewer flooding and proactively cleanse the network - preventing a problem before it occurs.

This approach has enabled us to maintain a balance between proactive and reactive interventions and retain our focus on the health of the underlying assets.

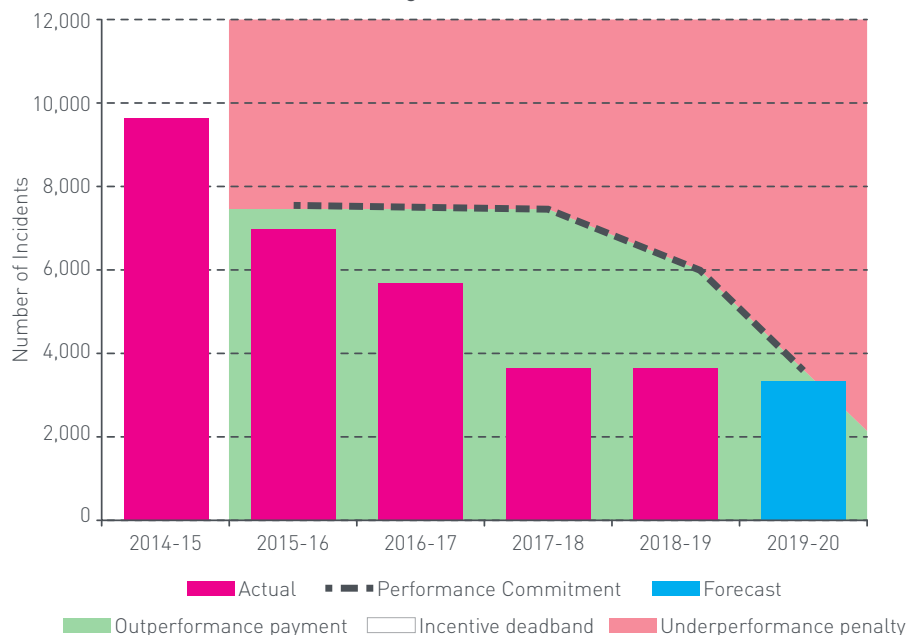
Steps to Improve

We're committed to preventing issues before they occur. By continuing to work with fast food outlets within the community we are reducing the amount of fats, oils and greases (FOG) that enter our sewers. Where our engagement doesn't work, we continue to prosecute those who misuse and abuse our network and put our customers and communities at a higher risk of external sewer flooding.

We've also successfully trialled a chemical solution to the build-up of FOG, also known as Fatbergs, in our sewer network. The chemical has been great at preventing the build-up of FOG in sewers and maintaining the hydraulic capacity of the sewers. We'll continue to use this in our highest risk areas to complement our customer engagement and prevention activities.

We've also worked hard to improve our performance on sewer blockages, which indicate the underlying asset health of our waste water network. Initiatives such as our Blockbuster campaign help ensure that customer education continues to be a primary tool in changing the behaviour of our customers to minimise the risk of sewer flooding.

SA2 - Number of external sewer flooding incidents



Sharing best practice

Our customers and the environment are benefitting from the improvements we have made in recent years. We want to share what we have learnt with other water companies so that all customers get to see these benefits. Ofwat also think it is important for us to do this.

So far we have:

- Met with other water companies to share experiences;
- Presented to the 'Fighting a Fatberg Conference' in February 2019 on our approach to dealing with fats, oils and greases being discharged from commercial premises;
- Presented to the Urban Drainage Group Autumn Conference on our approach to Partnership Working;
- Presented our strategy and approach to the industry experts, the Sewerage Infrastructure Network.

Future outlook

Resetting our targets from 1 January 2019 has locked in the great benefits for our customers. We recognise that it will be tough to deliver, but are confident that we can continue to find ways to deliver successfully next year.

Pollution incidents

Our impact on the environment is closely regulated by the Environment Agency. We report our performance against three categories:

- Category 1 and 2 serious pollution incidents - which have a major impact on the environment.
- Category 3 incidents - less severe in impact on the environment.
- Category 4 incidents - evidence of a spill but no noticeable impact.

We've seen a disappointing deterioration in the number of serious pollution incidents this year. While we've beaten our Category 3 incident target this has led to a slight increase in Category 4 incidents. Whilst we strive to prevent spills from occurring, it is important that our approach mitigates the impact of a spill when it occurs.

This year we have also agreed to lock in the benefits of our outperformance on Category 3 incidents for our customers and the environment. By agreeing harder targets we are ensuring our customers receive the ongoing benefits.

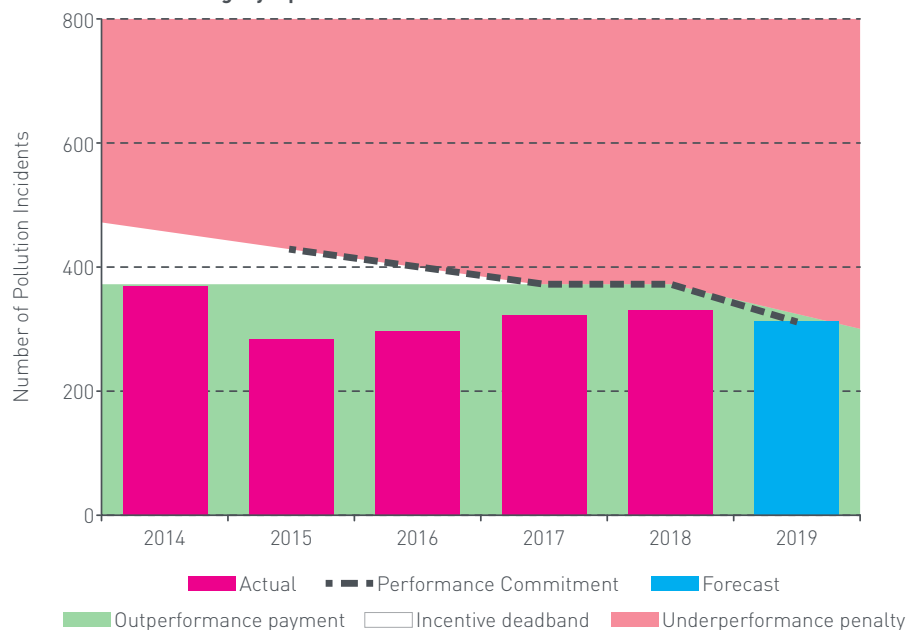
This performance has earned a £0.5 million outperformance payment.

Drivers of performance

We continue to use detailed data and analytics to identify hot spots and high risk areas where we can target our cleansing work to keep the sewerage network clear of obstructions and blockages.

By using the information provided by our network monitors we have a greater understanding of the real time condition of our network allowing us to act to prevent problems occurring. This has helped reduce the number of incidents we have seen from combined sewer overflows and on the foul sewer network.

SC2 - Number of category 3 pollution incidents



We have seen a small deterioration in the performance of our pumping station assets driven primarily by assets being out of supply. As such we're prioritising maintenance tasks on higher risk pumping stations and ensuring we have no repeat incidents at these assets.

Steps to improve

To improve the visibility of our assets we are installing network monitors in pollution and flooding hotspots and installing flow meters on critical assets. Additionally, the installation of monitors on around 85% of our combined surface overflows (CSOs) and storm tank discharges will improve our visibility of our network. Deployment of monitors has been prioritised based on location history and future risk.

This additional data will feed in to, and help drive, our pollution consequence model which looks at new ways to use meta-data to deliver further improvements. This combines the data with our understanding of the impacts of any incidents to design targeted solutions for each catchment.

We know that we need to improve our performance on certain assets.

By taking lessons we have learned from our water network balancing pressures within the system, we have identified there is more we can do on our rising mains assets to reduce the risk that a pressure surge could lead to a pollution spill. Similarly we're reviewing the proactive maintenance requirements for the pumping station assets to reduce the risk of a pollution incident.

We're also ensuring we drive root cause analysis and understand causal factors for each incident while embedding process improvements and lessons learned across our activities. Most importantly this is underpinned by our approach to continuing to do the basics brilliantly.

Future outlook

By 2020 we are forecasting to meet our revised target for Category 3 incidents and our Category 4 incidents target. We have a commitment for no serious incidents in 2019/20 and we're committed to aim for this while recognising we have never delivered this level of performance before.

Service Now - Water

Throughout the summer of 2018 we saw increased demand from our customers as the warm, dry weather hit our region. In response, we mobilised all of our resources to ensure we did everything we could to keep water flowing to our customers. Following a concerted and co-ordinated effort across all teams, we were able to meet our leakage target. We fell short of our customers' expectations by missing our supply interruptions target (though we finished the year with a positive trajectory) and the difficult start to the year meant we missed our mean zonal compliance target. While we are still in penalty we have delivered a strong 6% improvement on drinking water quality complaints. We've got more to do, but we are confident we're now on the right trajectory for success.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
WA1	Drinking water quality complaints	Number	12,687 (9992)	11,856 (9954)	(£1.707m)
WA2	Mean zonal compliance	Percentage	99.96% (100%)	99.94% (100%)	(£1.707m)
WB4	Number of minutes customers go without supply	Minutes	34.29 (10.8)	19.06 (9.4)	(£7.720m)
WB2	Leakage	ML/day	443 (434)	419.5 (423.5)	(£2.255m)
WB3	Speed of response to visible leaks	Percentage	23% (90%)	32% (95%)	(£1.327m)
WC1	Customers rating our services as good value for money	Percentage	59 (52)	63 (53)	£0.124m

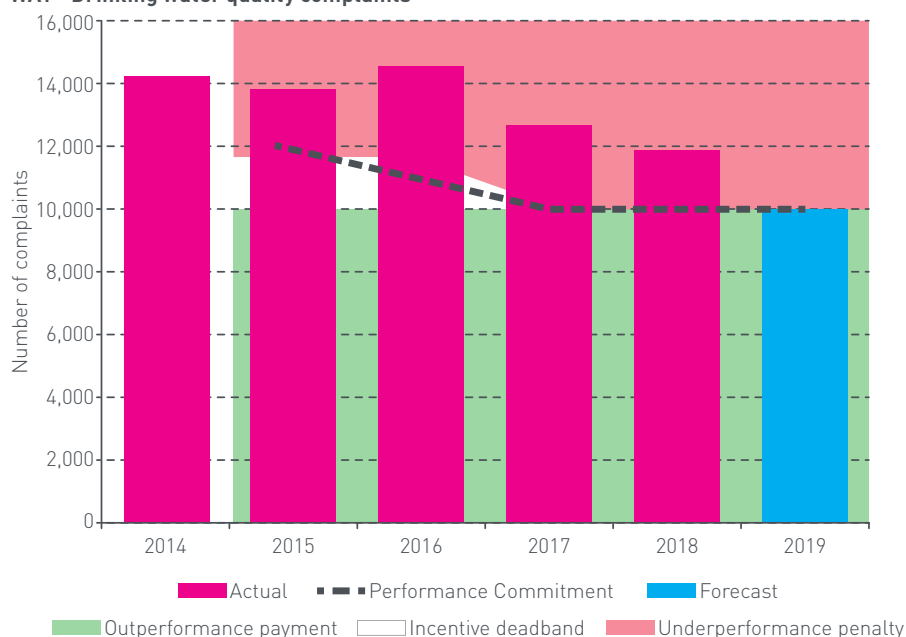
Drinking water quality

Drivers of performance

We've delivered a 6% year on year improvement in the number of drinking water quality complaints received meeting the commitment we gave to the Drinking Water Inspectorate (DWI) and continuing our improving performance towards our regulatory target for 2019.

Through the insourcing of our dedicated flushing team, and together with additional external resources through the autumn, we have been able to proactively flush 400 distribution areas. We achieved this despite actively managing our activities during the summer to reduce pressures on the availability of water. We have also continued to see the benefits of our change in treatment approach at Frankley treatment works where a switch to a lower manganese chemical has helped improve the quality of water in the network.

WA1 - Drinking water quality complaints



Unfortunately a slight increase in the number of taste and odour complaints, and lead detections in small water quality zones, has resulted in a decrease in our mean zonal compliance score. Whilst any failure is unacceptable, the impact

of these in our smaller zones has a greater impact on the overall compliance level.

Steps to Improve

We know that our approach is working as we continue to make improvements in drinking water quality. But we know we still need to do more to meet the commitments we made to our customers and to drive further improvements in the future.

Our focus will continue to be on proactive flushing and cleaning of the highest risk areas of our network. We are committed to maintain the elevated levels of activity in the early part of the year to ensure we retain the benefits of current resource levels.

To improve our mean zonal compliance results we have installed temporary treatment processes to ensure that bulk supply imports maintain the standards needed. In the smaller water quality zones we are revamping our inspection approach to combine the regulations, fittings and sampling inspections to drive improvements in efficiency and compliance.

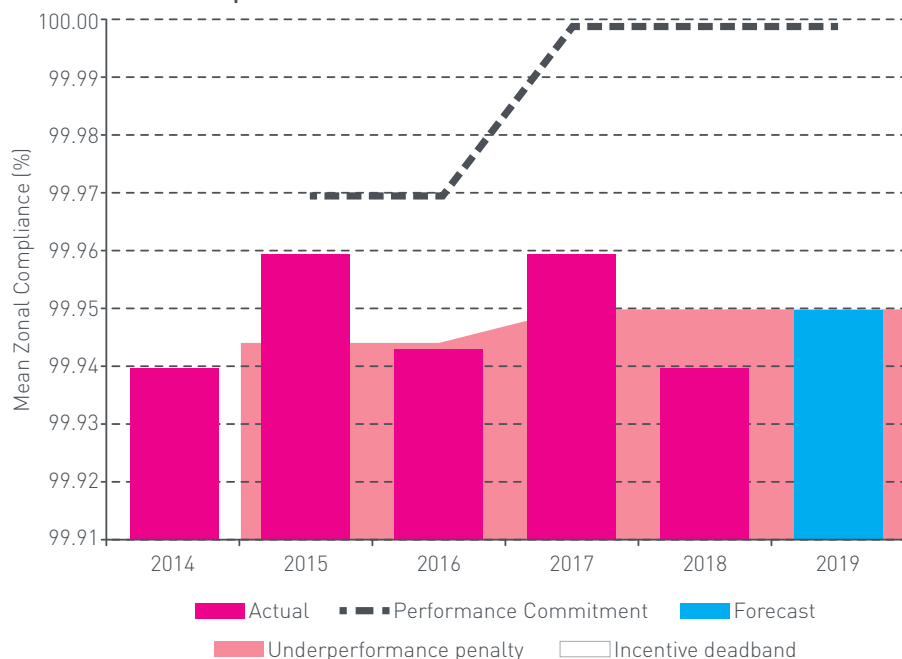
In order to ensure we minimise the number of lead exceedances the efficacy of our orthophosphate dosing is being reviewed. This includes our approach to seasonal dosing to ensure we provide a consistent level of protection against lead every day.

To complement this activity, we have opened a new, state of the art laboratory at Church Wilne treatment works. This will help ease the pressures on our Bridgend laboratory which will focus on analysis of our regulated samples.

Future outlook

We're confident that the improvements we have delivered this AMP will enable us to deliver our water quality complaints commitments next year. This will be reliant on our flushing and cleansing programmes but will also be supported through the

WA2 - Mean zonal compliance



work undertaken to reduce supply interruption events and calming of the network.

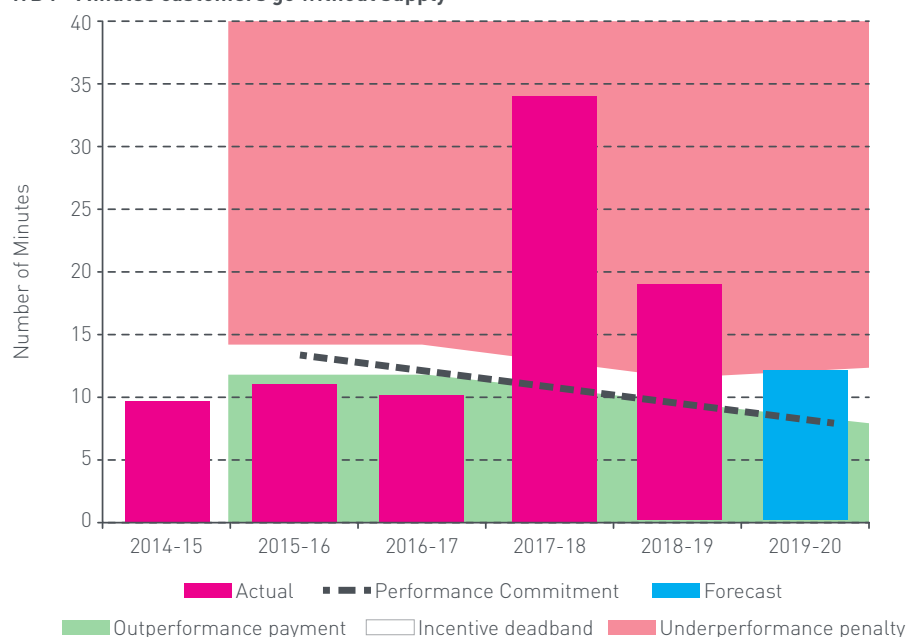
We expect to perform within the agreed performance deadband range for mean zonal compliance for the final year of AMP6 as we also strive to improve against the replacement measure, the compliance risk index.

Supply Interruptions

Drivers of Performance

Through the hot summer we saw significant increases in demand for water. We also experienced a number of ground shift events which put pressure on the network and led to an increase in burst mains.

WB4 - Minutes customers go without supply



As the summer progressed, we prioritised our people and resources on maintaining supplies through temporary restoration and tankering. Our fleets were working 24/7 to move water around our network to top up supplies in the areas most affected.

Building on our experience, we've now changed how our Network Control room is designed and operated. This should facilitate quicker decision making allowing us to reduce impact to customers of any failure.

To improve the availability of data we have installed high pressure loggers across our network which gives us real time information. This improves our ability to identify pressure transients and respond sooner and, combined with improvements in our pump controls, improve the way we manage potential risks to supply.

Steps to improve

Our forward strategy focusses on five pillars to ensure that we minimise the risk of a supply interruption event, combined with an improved ability to respond, will deliver the level of service our customers expect.

1. Prevent

Our aim is to calm the network to reduce the risk of mains bursting. This requires a multi-track approach that combines high quality data with targeted investment and maintenance.

We have modelled our entire distribution network, overlaid with analysis of the potential impact of a burst on our customers supply to identify our highest risk communities.

This analysis has given us the right level of insight to ensure we target maintenance of our network where it will have the greatest benefit for our customers.

2. Rezone

Cross-connections within the network, improving our ability to rezone the network is an important part of our response to a burst. They give us the ability to isolate the burst and ensure the network remains at sufficient capacity to keep our customers on supply.

We have also ramped up our pressure release valve and air valve maintenance programme to ensure that we can operate all of the safety systems on our network whenever we need them.

3. Temporary Restoration

Alongside rezoning of the network we use our ability to temporarily restore customers supply in the event that a repair is more complex to complete.

In some areas we make use of overland connections to bypass the burst and maintain supplies. Our fleet of tankers can be mobilised to inject water in to the system at strategic points downstream of a burst. We can also utilise power bowzers to compliment the tankers in more remote areas.

4. Repair

Ultimately, returning service to normal relies on an efficient, fast and robust repair being done. We've used this year to review and reinforce the quality we need from these jobs to reduce the risk that our customers experience the same problem twice.

5. Customer Communications

We understand that the loss of supply can be difficult for our customers, especially those who may find it more difficult to get water from an alternative supply. During all incidents it's really important that we provide customers with clear and accurate information.

Through the use of our website, social media channels and our automated text messaging system we aim to provide our customers with the information they need.

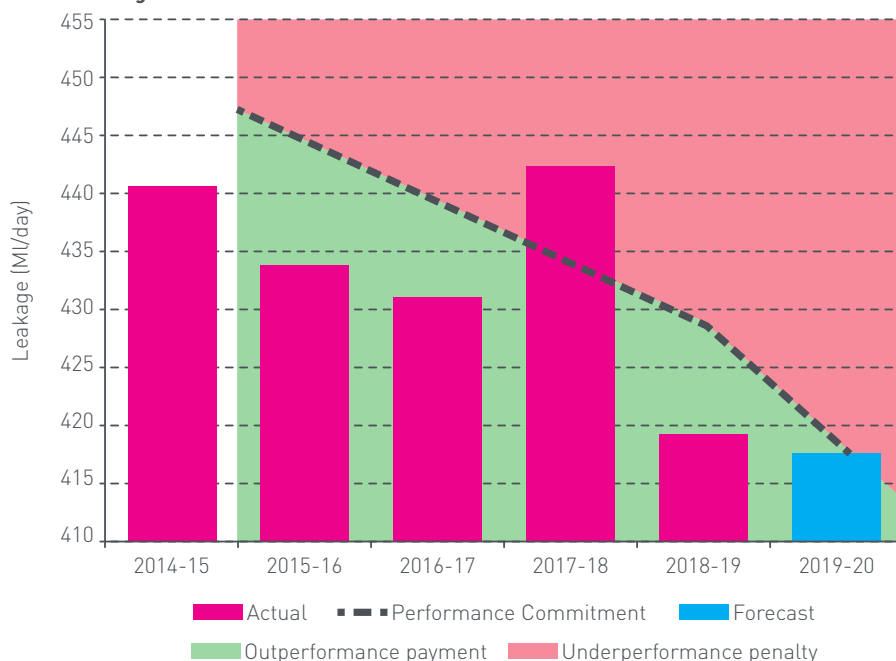
Future outlook

We are confident that the improvements we have put in place will deliver a better level of service for our customers. We have already seen significant improvements in our performance during the early spring of 2019. We expect to deliver upper quartile performance for the last year of AMP6 to ensure we're on the right run-rate heading in to AMP7.

Leakage

Leakage reduction is a key measure for our customers, consistently emerging as a high priority across multiple research projects, social media scraping and operational insight. During our business plan research 55% of customers said that reducing leakage was their top priority. It demonstrates that we are playing our part to protect our resources and ensure there is enough water to meet future demands. Our challenge to reduce leakage this year was made more difficult by the adverse weather conditions, which saw a harsh winter followed by a long dry summer, putting us considerably behind target at half-year. This year we've had a company-wide effort, investing heavily and committing significant resource, to support our leakage recovery programme and review our leakage component data. This combined effort has been a great success meaning we hit our leakage target for the reporting year; and it put us ahead on track to deliver further leakage reductions over the coming years.

We do recognise, however, that our underlying unaccounted for water has increased and, in line with our previous approach, we will be returning £2.255 million to our customers. The data improvements we have made this year have provided greater confidence in our ability to differentiate between true increases in water consumption and leakage, enabling us to target real losses more effectively going forward.

WB2 - Leakage**Drivers of performance**

Our performance during the first half of the year was impacted significantly by the challenging conditions that were faced across the industry. Firstly repairing the network following the impacts of the freeze-thaw event in March 2018, then we diverted our frontline operatives to maintain supply for our customers with the significant increases in demand during the prolonged dry summer. This included switching focus to tasks such as tankering, rezoning of networks and bringing standby sources in to operation. This period impacted the background level of leakage as, in some areas, the natural rate of rise over the summer was not matched by the number of repair jobs we were able to complete.

So, in September, we reviewed our plan and took major steps to turn performance around. This included a significant increase in our frontline resources to both find, and fix, additional burst pipes. Our leakage focussed workforce increased by 268, increasing our capacity in fixing leaks by 67%. To support this we also increased our level of resources across the full end to end process, redeploying

internal resources from mains laying, new connections and meter readers, to support more directly with leakage tasks. This combined with the early roll out of our redesigned operating model which incentivised local ownership and identification of leaks, has driven significant reduction in the backlog of work by 65%. Alongside this we have increased the speed at which we fix leakage jobs, improving our overall time to fix leaks by 50%. We have also achieved a 78% reduction in job build time and driven a circa 20% improvement in field productivity.

Alongside the recovery programme, and following data trends identified at half-year assurance, we achieved a better understanding and have improved the accuracy of the underlying data that makes up our leakage calculation. This has enabled us to have better data to more effectively target real losses going forward. At the start of the data improvement work we were unaware of the impact that this would have on our leakage commitment, and are pleased that it has been a positive contribution to our performance. To ensure we are driving towards best practice external industry experts

have peer reviewed our approach to the leakage calculation, including how we determined increase in demand over the summer period.

As in prior years, we have chosen to base our ODI on 'real losses' which exclude the improvements made in our data. While we have seen significant results from the second half of the year putting us in a good position for the years ahead, overall, real losses increased during this financial year to 18ML/d resulting in an ODI penalty of £2.255 million.

Leakage movement over the last 12 months

2017/18 outturn	435.2 ML/day
Unaccounted for water change	+18.3 ML/day
Data improvements	-34.0 ML/day
Methodological change	0.0 ML/day
2018/19 outturn	419.5 ML/day
2018/19 target	423.5 ML/day

Improving our performance

An area of work where we have seen particular improvement is in our revised approach to fixing private supply pipe leakage (BoPPs) which account for around 20% of our total number of leaks. We have continued to support our most vulnerable customers by assisting them to reduce leakage on supply side pipe work and have significantly scaled up the number of BoPPs gangs by 150% to support this work. Our BoPPs ongoing work has reduced by 50% since June 2018 and the time to fix a BoPP has reduced by nearly 50% from 43 to 22 days. This has led to a 33% reduction in BoPP leakage since its high point in June 2018.

We improved our ability to find leaks faster through the installation of 19,500 acoustic loggers in the most at-risk parts of our network, with the planned installation of an additional 15,500 loggers by March 2020. This has been complemented by better use of technology through our Virtual Technician approach. Our customers are really pleased

with this new service, which has been diagnosing potential leaks through video calls with customers, which helps prioritise the order in which our teams are deployed to jobs. Our network optimisation hasn't stopped there as we have also optimised pressure reducing valves across the network, which was successful in reducing leakage by 35% in one area alone.

Through industry benchmarking and a global search for innovation, we can now identify potential leaks through dynamic pressure modelling, use of advanced analytics to combine billions of data records to target leakage and our continued use of satellite technology. This includes partnering with electricity distribution firms who survey the grid from the air - a great vantage point to spot potential rural leaks. We are exploring unique ways of using the information, including the potential to overlay our pipe network data into the video software to support automation of the analysis. We are also rolling out advanced technology which enables us to either reduce or stop leakage completely on private side pipework without the need to dig up the pipe.

To support this a number of wider activities took place including utilising our wider staff base to review potential void properties through our Adopt a District Metered Area ('DMA') programme. More than 500 of our passionate employees, including Executive members, wanting to improve performance for our customers, have adopted their home DMA and noted where properties marked as void have potential residents (for example cars on the drive, or lights on). This has led to 6.5% of all DMAs being inspected and improved the accuracy of our assumptions.

We have recently launched the World Water Innovation Fund (the 'Fund') - joining forces with

like-minded companies across the globe to find new ways of working - pooling resources and ideas to develop and accelerate new technologies. Our £5 million investment in the Fund will make a real difference to peoples' lives across the world. The Fund's initial focus will be on leakage, which is a key issue for companies worldwide.

Securing confidence in our performance

We maintained a focus 24/7 with Executive oversight including over Christmas and New Year. Weekly reports have been submitted to the Executive as well as regular updates to our Board on the activities and progress of our programme. This focus was essential to ensure the recovery effort continued up to, and beyond, the end of the report year. Our persistent drive has pushed leakage to historic lows in some locations meaning we're in a good position looking forward to 2019/20 and AMP7.

Our annual Assurance summary, see appendix A, outlines the robust assurance carried out during the reporting year, including external assurance by Jacobs Consulting.

Speed of response to visible leaks

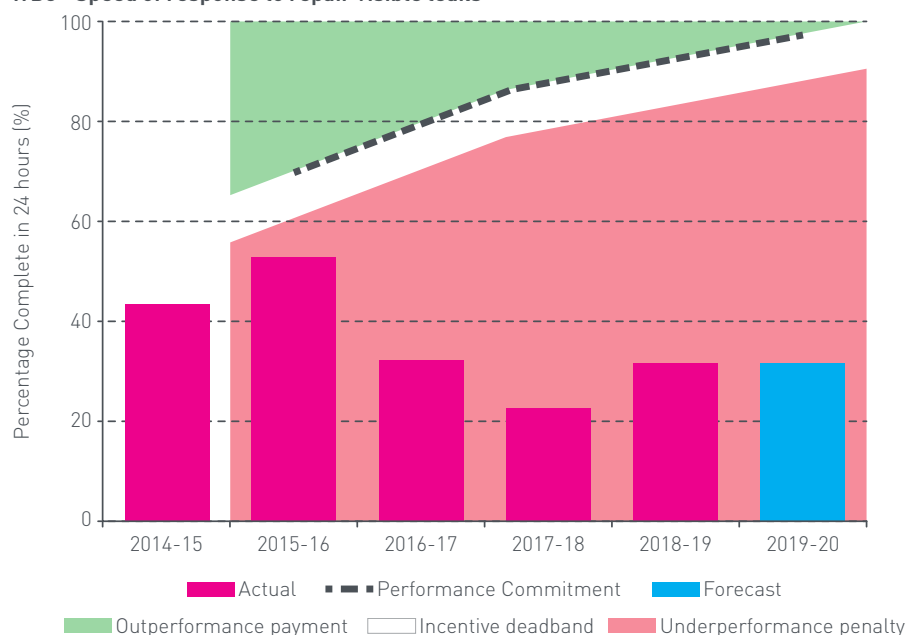
We've previously reported that this measure is not delivering for our customers in the way it is intended to; it is in customers' best interests that we pay a penalty of £1.3 million for our performance. As part of our plans for 2020-25 we have redesigned this measure to ensure it focuses on those leaks with the greatest impact due to their significance.

Our performance this year has improved slightly from the previous year, primarily because of the company wide drive on leakage. As part of this we increased our 'fix' resources to ensure we had more gangs working seven days a week - this had a positive impact on the average time it takes to fix all leaks.

At the same time, our new working processes which have sped up the time it takes to confirm leaks further reducing the total amount of time taken to fix them.

Looking forward, we are committed to hold performance flat through 2019/20 as we work towards our improved measure for AMP7.

WB3 - Speed of response to repair visible leaks



Service Now - Retail

Our customers tell us they want low bills, less sewer flooding and high quality water at the turn of a tap. Our upper quartile positioning in the UK Customer Service Index shows that we're making good progress here. We're disappointed by our SIM score though - as the operational underperformance has led to an increase in complaints this year. We've worked closely with the industry on the introduction of the new C-MeX measure which we believe will provide a truer reflection of our relative performance.

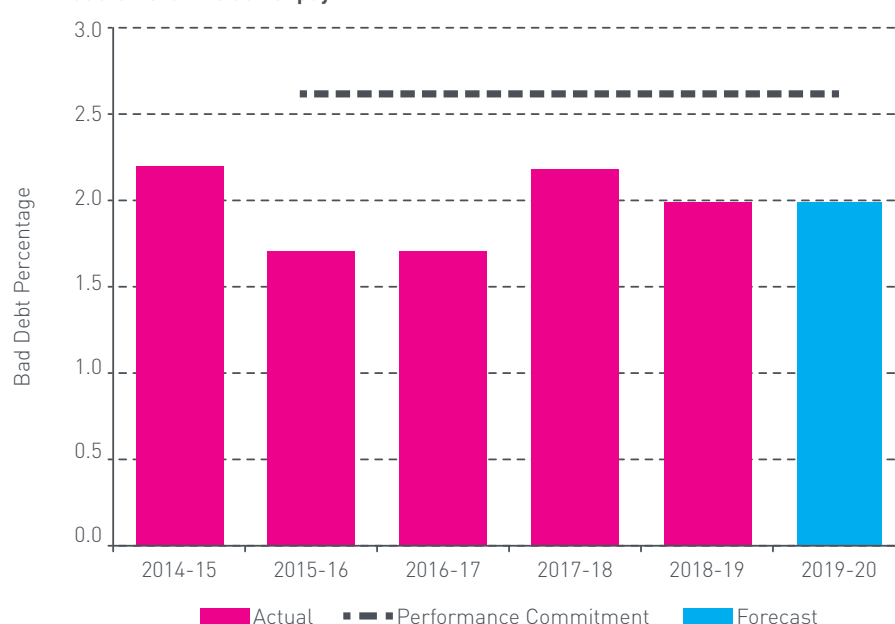
Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
RA1	Customer satisfaction with their services (based on a survey)	Grading	Upper quartile (Upper quartile)	Upper quartile (Upper quartile)	NIL Non-financial
RA2	Customers' experience of dealing with us (based on Ofwat's SIM)	SIM Score	83.2 (Upper quartile)	81.5 (Upper quartile)	Ofwat methodology
RB2	Percentage of customers who do not pay (household bad debt divided by total household revenue)	Percentage	2.2% (2.7%)	2.0% (2.7%)	NIL Non-financial

Drivers of performance

The operational issues we have experienced this year have directly impacted our customers which in turn has led to an increase in the number of complaints we received. We recognise that during the summer we focussed the resources of the business on protecting the supplies to customers and supporting those customers who were at risk of, or experiencing, a supply interruption. This was the right thing to do. It did, however, divert our critical resources from more day to day tasks which impacted on our wider service offering to our customers. It also indirectly led to an increase in second stage complaints as customers escalated their concerns.

We know that we still need to do more to give customers the level of service they expect when they contact us. Our Customer First initiative has driven an increase in first time resolution on billing contacts combined with upskilling of more of our customer service staff to enable them to deal with more complex billing enquiries. This also includes a more 'case management' approach to customer contacts as we ensure our staff are aware of each individual customers' service history prior to the call so they can provide customised support.

RB2 - Customers who do not pay



Our use of technology has been a success. We have one of the highest self-serve rates through our digital channels and we're continuing to evolve the options to ensure customers can complete their journey without the need to call in. A real improvement has been seen through the use of our virtual leakage technician work, where customers can use video calls with our leakage experts so we can get eyes on the problem instantaneously and improve our diagnosis of the problem.

This year we've seen a small improvement in our level of bad debt driven by the initiatives we promoted in previous years.

Our approach to reviewing the customer journey, trialling new payment plan initiatives and reviewing our end to end debt strategy has helped more of our customers that are struggling to pay to reduce their debt.

We've also seen a benefit from our data share with energy firms as we learn more about our customers' behaviour. We carefully communicate with our customers the impact carrying bad debt can have, such as on their credit rating. We're seeing a positive impact from these communications on customers actively working to reduce their level of debt.

Steps to improve

The Service Incentive Mechanism is being replaced by a measure known as C-MeX. This provides a wider view of customer experience of the services we offer.

We're really excited about this as it will incorporate all of the activities we do to enrich our customers lives, such as our visitor experience sites and community work, alongside our operational activities.

We're also confident that we can continue to meet our commitment to customers relating to bad debt.

Asset Health

Understanding the health of our assets is really important. It ensures we're not only investing for our customers today, but also for the customers of tomorrow. We've identified the key measures that demonstrate whether we're increasing the stress on our network and treatment assets which could lead to a deterioration in performance in future. But these are a small subset of all of the measures we use as a company to check the health of our assets.

This year we have included two new measures within our asset health basket. These measures are designed to alleviate the future stress on our network due to growth and surface water runoff; therefore they contribute to the wider health of our assets.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
WA3	Asset stewardship - number of sites with coliform failures (Water Treatment Works)	Number	8 (less than 8)	13 (less than 6)	(£3.704m)
WB6	Asset Stewardship - mains bursts	Number	6,205 (<6,905)	6,453 (<6,756)	NIL
SA4	Asset stewardship - blockages	Number	45,401 (<50,078)	46,898 (<49,080)	NIL
SC3	Asset stewardship - environmental performance	Percentage	97.67% (100%)	97.69% (100%)	NIL
SA3	Partnership working ¹	Number of schemes	8 (NA)	5 (NA)	NIL
SC5	Sustainable sewage treatment ¹	Number	0 (0)	0 (0)	NIL

Notes:

1. Reducing the stresses on the network help improve the overall asset health. This is why we have brought Partnership Working and Sustainable Sewage Treatment in to the Asset Health category this year.

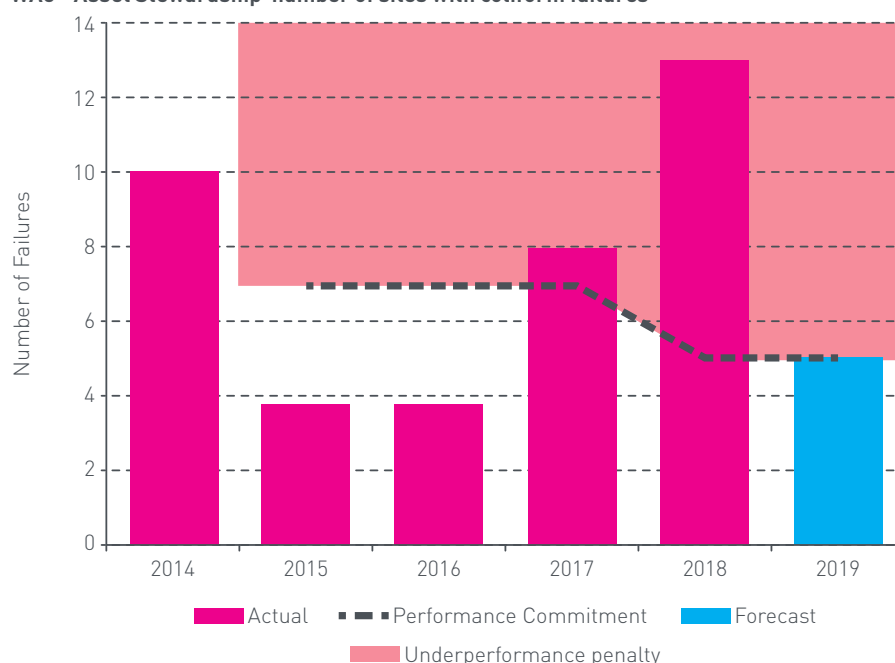
Water Service

Drivers of performance

We've made significant investment in this area over the last four years, with the focus being on the highest risk surface water treatment works. The deterioration this year is as a result of coliform detections at 13 works, the majority of which are groundwater sites (tank ingress risks and sample line failures). We've now adapted and extended our risk based investment approach, initiating a replacement programme to change our sample lines to copper as well as reviewing the maintenance of our tank hatch inspections.

We have also installed in-line flow cytometry at all water treatment works and distribution surface reservoirs. This analysis allows us to understand the unique bacteriological DNA fingerprint of each treatment works. By knowing how this fingerprint is changing we

WA3 - Asset Stewardship-number of sites with coliform failures



can adapt our treatment processes to minimise the risk of non-compliance and ensure our water quality is always at its best.

On the network we have seen a significant increase in the number of burst mains repaired as we have stepped up our active leakage repair programme. Increasing the

level of find and fix is a key driver in reducing leakage, and as we start to reduce leakage further we need to fix more, smaller leaks to get the same level of benefit.

Towards the end of the year we have seen the number of bursts repaired return to the level from before the freeze-thaw event of 2018 as our network returns to a more stable state.

Waste water service

Drivers of performance

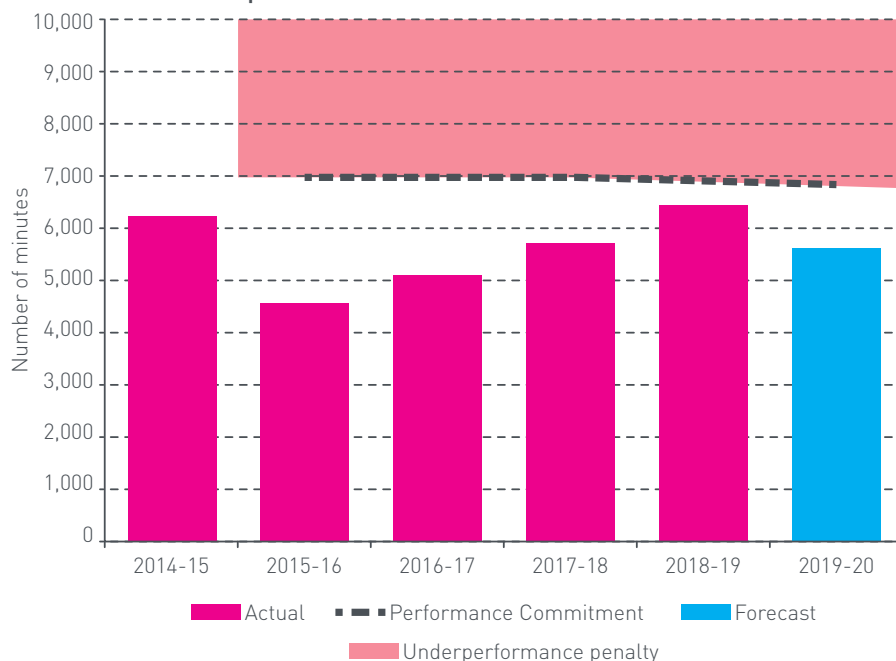
Whilst we have seen a slight increase in the number of blockages year on year we know that driving down the total number of blockages is key to fundamentally changing the underlying health of our waste water network.

Our Blockbuster campaign takes the lessons we have learned from sewer flooding, overlaying high quality data and geospatial understanding of the network to ensure proactive cleansing is focussed on the highest risk areas. This, combined with a targeted education campaign, significantly reduces the number of repeat blockage incidents.

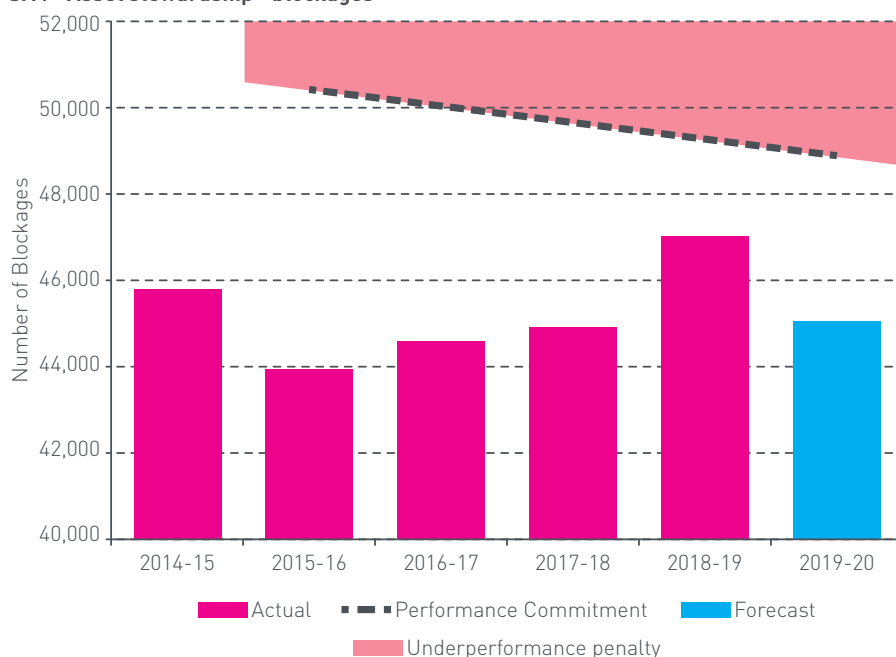
Where there are repeat issues our teams undertake a more detailed investigation of the wider catchment to identify the root cause. We have also ensured our teams empathise with our customers whenever they engage with them to ensure the impact of repeat blockage incidents is at the forefront of their minds.

In a first for the industry we have been collaborating with other companies to issue the 'Safe to Flush' accreditation for disposable wipes. This scheme gives customers a simple way of understanding which brands are ok to flush down the toilet and which brands should be sent to landfill.

WB6 - Asset stewardship - main bursts



SA4 - Asset stewardship - blockages



Partnership working

We work with many different partners to deliver solutions which benefit our wider society and the environment. For our customers these projects reduce the risk of sewer flooding either to homes or public open spaces.

We committed to deliver 21 partnership projects across the 2015-20 period. This year we have completed a further five projects:

- Chesholme Road, Coventry - Joint scheme with Coventry City Council to address a long standing complex flooding issue affecting 14 properties. This innovative scheme delivered by multiple partners over different phases included surface water separation, property flood resilience measure, underground storage tanks and above ground grassed swale.
- Badsey Brook, Broadway, Worcestershire - The scheme consists of a £4 million flood storage area in an 18 acre field holding up to 135,000m³ of flood water delivering reduced flood risk to over 250 properties. The EA delivered scheme also delivered benefits in terms of reduce risk of flooding from the sewer, increased resilience of our sewer system and treatment works, and reduction in the size and cost of future work on the sewerage system.
- Carisbrooke Road, Leicester - Joint scheme with Leicester City Council to reduce risk to a high profile flooding location. Property flood resilience measures (such as flood doors and flood gates) installed at 9 properties. Jointly funded by Severn Trent and Leicester City Council.
- Slimbridge, Gloucestershire - Joint scheme with Gloucestershire County Council to address a persistent and complex flooding location. Together the different elements of the scheme reduce risk of

flooding to 14 properties and 5 areas. Innovative scheme involving removing infiltration from the sewers by flood grouting, lining, replacement and sealing; replace and repair highway drainage and culverted watercourse; and separating surface water from our combined sewer by disconnecting impermeable areas from the sewer and connecting to the new highway culverted (this element was delivered by GCC and we paid them to do this for us).

- Mansfield, Manvers Street - Joint scheme with Nottinghamshire County Council delivered by Severn Trent. Property flood resilience measures (such as flood doors and flood gates) installed at 8 properties, addressing a complex sewer and surface water flooding issue. Jointly funded by Severn Trent and NCC.

Looking forward, we're confident that we will outperform this commitment by 2020.

Sustainable sewage treatment

This commitment is designed to support our drive to identify more innovative ways to provide additional treatment capacity without the need to build new, expensive traditional technologies.

To qualify, a scheme has to demonstrate that we have avoided the need to build additional treatment capacity to accommodate growth in the catchment, either through new innovation in pre-treatment technologies or through catchment solutions which reduce the volume of water entering the system. The incentive is based on the equivalent number of people that we need to provide capacity for.

We are in the final stages of constructing a number of schemes which we believe meet the expectations of this commitment. At one site we are undertaking a UK first by utilising a new technology to support stripping of phosphorus ahead of the traditional activity sludge process. This will prevent overloading of the existing plant and allow it to remove more phosphorus than before. Installing this new process means we won't have to increase the capacity of the works to accommodate growth in the wider catchment whilst still meeting our environmental obligations.

At other sites we are looking at more innovative ways of using existing technology to give us the benefit to treat more water without increasing traditional process capacity.

We recognise that there is some ambiguity as to exactly what projects would qualify for this measure. So we are working with our Water Forum, and our independent technical assurance partners, to rigorously test each project against a number of qualifying criteria. This will ensure we only claim a site where it meets these stretching criteria.

Resilience

Our ability to cope with unexpected stresses and strains and remain capable of delivering service for the long term is fundamental to our business. We take a systems approach to resilience which considers our workforce and skillsets - training our workforce for the future and investing in the next generation through apprenticeships. Our corporate leadership also considers how the company is resilient in its financial structure, our operational performance and the regulatory risks we face both today and for the future.

Our commitments focus on the resilience of our water resources and asset base to ensure we continue to meet the needs of our customers today and tomorrow.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
WB5	Percentage of customers with resilient supplies	Percentage	77.4% [NA]	78.1% ¹ [NA]	NIL
WB7	Number of properties at risk of low pressure	Number	214 [250]	158 [229]	-£0.020m ²
WB8	Restrictions on water use	Number	0 [0]	0 [0]	NIL
WB9	Timing delays on Birmingham resilience scheme	Milestone	Milestone met (Milestone)	Milestone met (Milestone)	NIL
WB10	Non-delivery of Birmingham resilience scheme	Milestone	Milestone met (Milestone)	Milestone met (Milestone)	NIL
WB11	Timing delays on the community risk schemes	Milestone	Milestone met (Milestone)	Milestone met (Milestone)	NIL
WB12	Non-delivery of the community risk schemes	Milestone	Milestone met (Milestone)	Milestone met (Milestone)	NIL

Notes:

1. Resilient Supplies - the increase this year is as a result of the boundary change and not due to additional resilience built in to the network.
2. Low pressure - we are reporting a penalty for low pressure taking in to account restated historic performance. The value included in the table is the net position.

Birmingham Resilience Project

The Birmingham resilience project (BRP) delivers enhanced resilience to our customers in two principal ways:

- Allows Birmingham to be supplied without reliance on Elan Valley sources - River Severn and Strategic Grid will enable supplies to be maintained in the event of a failure of the Elan Valley aqueduct/reservoirs (EVA).
- Allows the EVA to be taken offline for 30 days each year enabling proactive maintenance - Manages the risk associated with our most strategic and efficient water source.

The fundamental components of the treated water workstream (constructing the necessary WTW

upgrade at Frankley) are due to be completed in September 2019. This will conclude the substantive construction of the treatment works upgrade in line with the PR14 FD requirement.

Treated water component commissioning and testing will then lead into a full scale test using EVA water that is due to conclude in February 2020. This will include a full stability test of the treatment process.

Concurrently, the raw water workstream (constructing the new Lickhill river intake and pumping station and the pipeline to Frankley) will continue until December 2019. All substantive components other than the intake structure are due for completion and associated component commissioning by September 2019. This will conclude the substantive construction of

the Pumping station and Pipeline components in line with the PR14 FD requirement.

On completion of the EVA water stability test of the treated water workstream, and the component testing of the raw water workstream, a final river water stability test and commissioning will be undertaken. This will use the raw and treated water assets end to end and help complete the commission of the programme.

Within the report year we have also completed the second of three community risk projects in line with our commitment dates to our customers. We are on track to complete the third and final scheme on schedule in 2019/20.

Properties at risk of low pressure

Our customers have told us that issues with pressure are their most experienced service failure. Whether this is for a short, one-off period or something that occurs regularly it prevents our customers from going about their daily routine. This year we identified an inconsistency in the way our low pressure assessments were undertaken across our regions. We took steps to re-establish our standard approach and ensure that all properties were assessed against the same criteria.

We took the decision to review historically reported low pressure values and identified a number of properties in each of the last three years where we could not confirm that the properties were not at risk of low pressure. As such we have taken the decision to restate our reported values, and adjust the incentive payments, as per the table below:

	Original value	Restated value	Adjustment to ODI
2015/16	162	204	-£0.033m
2016/17	187	231	-£0.035m
2017/18	204	214	-£0.008m

Drivers of Performance

The profile of properties experiencing low pressure issues throughout the year was normal, however the absolute number of properties was exacerbated by the dry weather experienced in the summer of 2018. The increase in demand across the network put greater strain on some parts, leading to customers experiencing a drop in pressure.

Steps to improve

Throughout the year we have completed a number of both operational and capital schemes to alleviate low pressure issues. We changed our approach to design, build and commission these solutions to reduce the end to end time to complete. This more agile approach was in part due to our move to use more tier two contractors.

Our solutions include a combination of rezoning, creating new trunk main inlets and splitting of DMAs which allows us to find and fix burst mains quicker, reducing the pressure variations further down the network.

We have also shown great collaboration across teams to find optimal solutions. We had considered a number of capital solutions to one particularly difficult scheme, but could not find an optimal solution at an acceptable cost. But our operational teams identified an opportunity to split the DMA and rezone the network whilst installing pressure release valves in optimal places.

Forward look

We are confident of meeting our target in 2019/20 as our analysis continues to focus on properties at future risk of low pressure. At all times we will continue to look for solutions that offer multiple benefits.

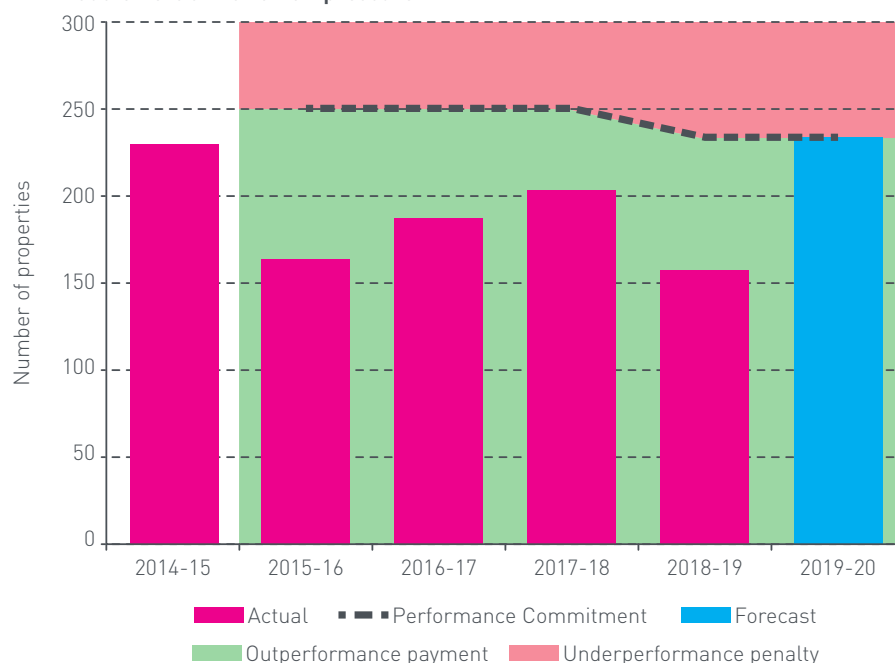
Restrictions on use

The last time we imposed a temporary use bans on any of our residential customers was over 20 years ago, back in 1996.

Despite the driest summer on record leading to an increase in demand of up to 400 Ml/day at times, we were able to balance the demands on the network without enforcing a temporary use ban. We used a number of communication channels, including our first TV advert, to appeal to our customers to take care of our precious resource.

We do not forecast that we will use temporary use bans before March 2020 - meeting our commitment to not implement one for the entire AMP.

WB7 - Customers at risk of low pressure



Resilient supplies

Making our assets resilient to shocks helps ensure we provide consistent services for both our current and future customers. This measure focusses on the percentage of our customers who we can supply through a permanent second source of water through either a dedicated second source (such as a borehole) or creating connections within the network to move water around our region.

The change in our operating area has added complications to this measure. The percentage improvement offered by the schemes we are delivering now contributes a greater change following the boundary realignment. As such, we consider it sensible to track delivery against the number of customers that would deliver a 0.7% increase in compared to the target set at PR14.

Whilst we have not completed any projects this year, we are committed to deliver the same projects as originally intended

Serving Our Community

We're increasingly being seen as having a key role in the everyday lives of local communities - this was a big part of our fast-tracked PR19 plan where we focussed on driving forward the social purpose agenda. We've since agreed, alongside the industry, a series of pledges that form our new Public Interest Commitment. We believe that education gives our customers a better appreciation of our, and their, role in achieving societal and environmental goals. Supporting our financially vulnerable customers is also important to ensure we do everything we can to reduce the stress on individuals. We're proud of our achievements and will aim to do more alongside delivering our core water and wastewater services.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
WF1 SE1	Improved understanding of our services through education	Number	200,536 (140,000)	185,371 (119,395)	NIL Non-financial
R-B1	Customers helped by a review of their tariff and water usage and/or supported by the Severn Trent Trust Fund	Number	51,652 (50,000)	52,547 (49,750)	NIL Non-financial

Customer Education

We have maintained our strong performance from 2017/18 and educated a further 185,371 customers, bringing the total over the last four years to 670,659.

Drivers of performance

We know we've got an education programme that delivers quality messages to our customers and schools. This year we have taken important steps as we begin to transform our approach to align with the ambitions of our AMP7 commitment.

Our schools programme continues to educate on the three key messages:

- Safe to flush - making sure only the three P's go down the toilet
- Using water wisely - how to take care of our wonderful water and become more efficient
- A healthy you and healthy environment - promoting the use of our refill stations rather than fizzy drinks and reducing the amount of single plastic use

Alongside the assembly programme we have also designed our immersive education buses.

The buses provide children with more interactive approaches to help them learn through games, hands-on experiences and digital media.

We've partnered with Minecraft to build a 'water world' allowing children to move around in virtual reality. Not only have we rebuilt one of our water treatment works to allow the exploration of a real life asset, we have also created virtual assets which allow the exploration of the network in miniature.

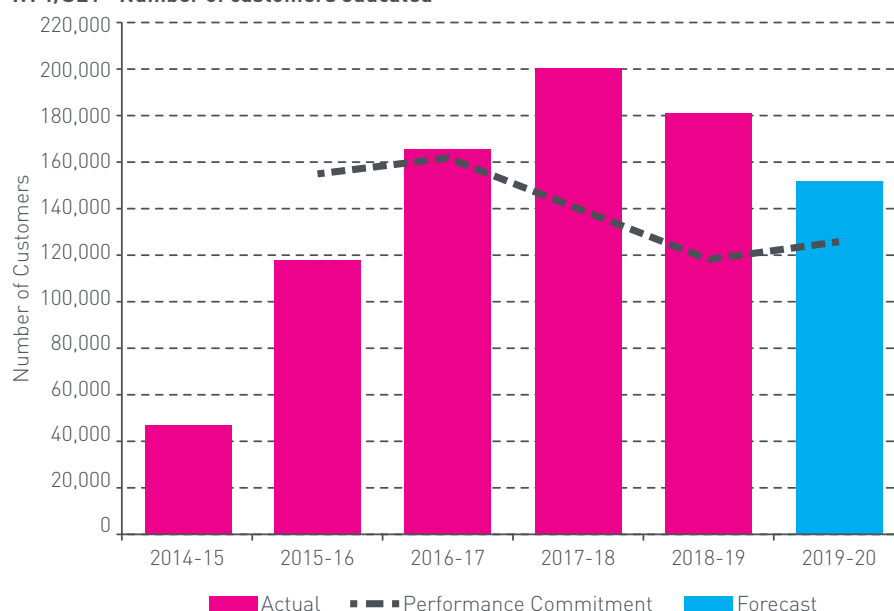
The education buses have been made available to every primary school in our area and we've had great feedback so far. We are also looking at opportunities to use them through road shows and events to help promote our key messages.

Steps to improve

We understand the need to educate our wider customer base through our in home water efficiency audits and sewer misuse programme. Both continue to be important parts of our wider programme.

Our TV advert focussed on taking care of our precious resource and was seen by over 3.5 million people in our region. We've complimented this by improving the education section of our website, made use of our social media platforms and

WF1/SE1 - Number of customers educated



provided tips for efficient water use.

The nationwide refill campaign has proved a great success. We've rolled out in Coventry, Gloucester, Leicester, Nottingham, Worcester, Wolverhampton, Shrewsbury and Birmingham. This means there are over 1,400 refill stations across our region where anyone can fill up for free.

Future outlook

Our ability to sustain the level of activity gives us confidence that we will comfortably meet the cumulative target for the AMP. We are committed to also use 2019/20 to develop the programme further towards AMP7 and move to a more outcomes focussed measure of education.

Supporting customers with their bills

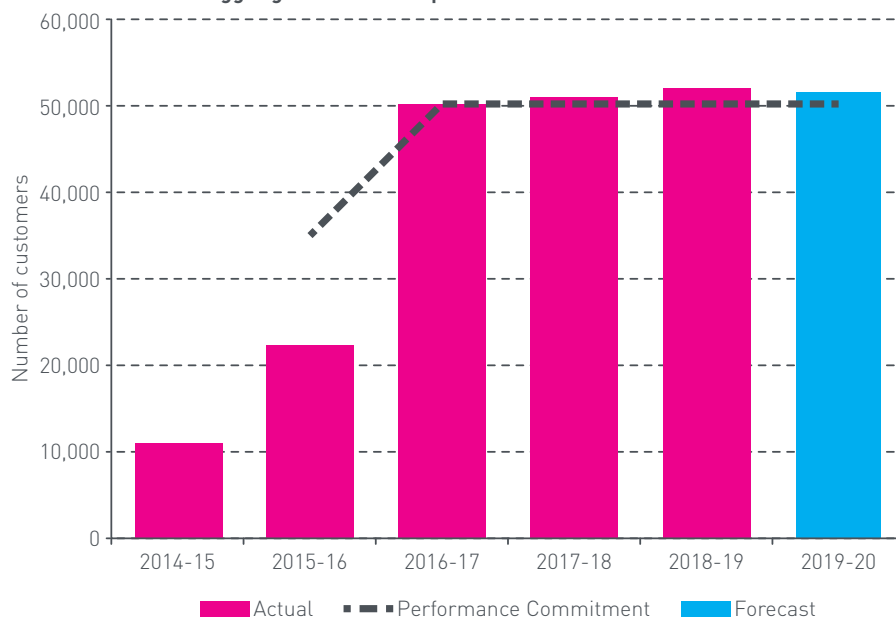
This year we've continued to offer our range of support schemes to help our customers struggling to pay their bills. This includes working in collaboration with social housing and charities to support customers in vulnerable circumstances.

We've reviewed and improved our payment matching scheme to ensure it's providing customers with a solution that helps them manage their bills and become debt free.

Future outlook

For the remaining years of the AMP we expect to continue to support at least 50,000 customers each year whilst continuing to evolve our offers of support and our priority services register.

RB1 - Number of struggling customers helped with their bills



Environment

Our customers are placing an increasingly high value on the natural environment. We share this view. We are committed to protecting and improving our environment and so we're particularly delighted with our performance in this area. Our stand out success story is our work on catchment management where our industry leading approach has been so successful we've surpassed our expectations. We're also making great progress on the delivery of our Water Framework Directive obligations and are working closely with the Environment Agency for opportunities accelerating improvements from AMP7.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18	2018/19	
WE1	Size of our carbon footprint - water	ktCO ₂ e	256 (222)	219 (219)	NIL
SD1	Size of our carbon footprint - waste	ktCO ₂ e	206 (209)	204 (207)	£0.044m
WA4	Number of successful catchment management schemes	Number	0 (NIL)	26 (12)	£9.270m
SC1	Improvements in river water quality against WFD criteria - waste water	Number	16 (NIL)	53 (NIL)	NIL
WD1	Improvements in river water quality against WFD criteria - water	Number	3 (NIL)	0 (NIL)	NIL
WB1	Resource efficiency (distribution input per customer)	l/p/d	235 (219)	225 (216)	NIL Non-financial
WD3 SC4	Biodiversity	Hectares	337 (N/A)	343 (N/A)	NIL
SA5	Statutory obligations (Section 101A schemes)	Number	32 (N/A)	19 (N/A)	NIL Non-financial
WD4	Sites with eel protection at intakes	Milestone	NIL	NIL	NIL Non-financial
SC7	Overall environmental performance	Number	{0} (N/A)	4 (3)	£2.389m

Carbon footprint

Drivers of performance

We've held the Carbon Trust Standard since 2009 for successfully measuring, managing and reducing carbon emissions.

Within our water service we have seen an overall increase in the both the volume and quality of water we deliver. Despite this we have seen the benefits of our efficiency programme as the overall energy used by our water assets has been steady year on year.

We are making use of the energy market as part of our strategy to move towards carbon neutrality. This includes the purchase of green energy wherever possible combined with self-generation to reduce the impacts further.

This year we have taken the option

to purchase additional green carbon credits to further promote the production of green energy within the UK. We've used our existing supplier to identify the best credits to purchase.

We believed this was the right thing to do, and would have purchased the credits irrespective of our performance commitment for carbon. But to ensure we were transparent in our approach we discussed the option with the Water Forum and our external assurance providers. Both were supportive of us using the credits to offset the increases in carbon emissions for the water service.

We expected an increase in waste water emissions this year as quality improvement schemes complete. There will be a further increase next year as the remainder of the programme completes.

Following discussions with the Environment Agency we have changed the way we handle tanker trade waste. This now receives a greater level of treatment prior to digestion which reduces the amount of renewable energy we can generate. We have been able to absorb this in to the carbon targets.

As part of our move towards a more energy efficient fleet we have installed our first electric charging point at our Sperrall works.

Future outlook

The water service will be under further pressure next year as we take the Birmingham Resilience Programme through its testing and commissioning phases. Following the approach agreed with the Water Forum we expect to continue to utilise the carbon credit option where efficiencies are unable to absorb this increase.

Catchment management

We've had great success with our catchment management programme and have successfully outperformed our target. We have been successful in 26 catchments in total, more than doubling our commitment of 12.

Drivers of performance

Our performance this year is a culmination of four years engagement with the farming community. As the leaders in the field we have learnt and adapted our approach each year to ensure that we meet the key performance indicators we set to demonstrate success of our scheme.

We have obligations in all of our catchments to help farmers mitigate their impacts on raw water quality but our approach has pushed forward what the water industry can do within this space. A key part of this is the local engagement and relationships we have developed with the farming community to ensure we maximise the benefits from the Severn Trent Environment Protection Scheme grants.

Steps to improve

Our obligation is now delivered for this period. Whilst we have ongoing commitments to drive forward catchment management we will use 2019/20 as a transition year as we start to learn more about how the activities impact on the water chemistry within our rivers, reservoirs and aquifers.

Water Framework Directive ('WFD')

At PR14 we included our first real options mechanisms relating to the WFD. At the time of the Final Determination our Water Industry National Environment Programme (NEP4) contained 92 defined schemes which reduced our impact on river water quality; these were classed as 'reasonably certain' within our submission. The programme ensured we contributed our fair share to deliver improvements in water classifications against the Water Framework Directive (WFD) criteria.

At the time of the Final Determination the NEP5 obligations had still not been finalised due to the timing of the River Basin Management Plan process. So we designed the outcome delivery to operate as a real options mechanism, automatically returning costs to customers where obligations were reduced or truing up the cost of delivering a larger scale environment programme. This ensured a balance of protection between customers and the company.

Alongside the Environment Agency we designed a unique points scheme which converted the site specific NEP5 programme in to a

more catchment based approach, aligning a point to a change in classification of an individual water body. For each stretch of river, as defined by the WFD, we mapped the site specific obligations to understand where completion of a single scheme will lead to an improvement in classification or where a combination of schemes was required to deliver the classification improvement.

The solutions we have employed across our works include a combination of tried and tested methods such as activated sludge and chemical dosing as well as more novel technologies to meet tighter permits than we have ever met before.

Looking forward, we are confident of outperforming the commitment of 202. This is because we've been working with the EA to manage changes to the scope of our statutory NEP5 programme (the design of our commitment has enabled us to seamlessly accommodate required changes). Delivering the flexed programme would result in 225 points. We're also looking to deliver further improvements if they can be delivered in a cost beneficial way as that would mean we've made even more progress towards our environmental objectives. To date we have delivered the following:

	2015/16	2016/17	2017/18	2018/19
Number of schemes complete	1	4	11	28
Number of points delivered	0	8	16	53
Cumulative points	0	8	24	77

Eels protection

Our regulatory performance commitment is to deliver 20 improvements by March 2021; there are no annual targets to meet.

The variety and diversity of fish species in our rivers is a great indicator for the natural health of the river. But it's also important that there are no physical barriers to fish migration that may prevent them from returning to natural breeding grounds and habitats. At a number of our assets we need to adapt our infrastructure to ensure that eels are not impeded along particular stretches of the river.

Our two high priority sites at Mythe and Upton are on track to deliver early in 2020, ahead of their regulatory commitment. The remaining obligations require a combination of solutions including new screening, improvements to existing screens and some fish friendly return to river apparatus. We consider we have met the milestone in 2018/19 to demonstrate delivery by 2021.

Resource efficiency

This commitment measures the average amount of water we treat and distribute each day per person we serve.

We have seen a 4% year on year reduction despite the significant increase in demand over the dry summer of 2018. Our company wide leakage drive has helped reduce the volume of water we put in to the distribution system each day.

However, we have not met the target we set ourselves this year.

Future outlook

Despite our efforts, by 2020 we are not forecasting meeting our committed performance level.

First time rural sewerage

We have a statutory obligation to connect rural properties to the public sewer where a duty exists. Our commitment for the 2020 is to connect 312 properties.

So far we have connected 113 properties and are working through the final detailed design and construction for a number of other projects. We forecast that we will outperform the 312 properties in line with our commitment.

Performance in Chester

This year we incorporated customers in Chester in to our company from 1 July as we aligned the boundaries of Severn Trent Water and Hafren Dyfrdwy with the England-Wales border. Customers in Chester agreed a slightly different set of measures and targets for the 2015-20 period - we will combine these with the rest of the company from April 2020.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2017/18*	2018/19	
A1	Discoloured Water Contacts	Number per 1,000 customers	0.91 (1.01)	0.45 (1.01)	£0.002m
A2	Mean zonal compliance	Percentage	99.97% (100%)	99.94% (100%)	(£0.019m)
B1	Supply interruptions	Hours/ property / year	0.07 (0.20)	0.03 (0.20)	£0.007m
B2	Sustainable economic level of leakage*	Litres / property /day	92.4 (90.8)	97.8 (90.8)	(£0.0262m)
B3	Security of supply index	Percentage	100 (100)	100 (100)	NIL Non-financial
B4	Number of bursts	Number	243 (222)	68 (54)	NIL
C1	Gross operational greenhouse gas emissions	Tonnes carbon dioxide or equivalent	7,709 (9,752)	951 (1,646)	NIL Non-financial
D1	Customers' perception based on market research	Percentage	73% (Improved)	67% (Improved)	NIL Non-financial
E1	Per capita consumption and water efficiency	Litres / person/day	136.57 (129.44)	132.76 (128.37)	NIL Non-financial
E2	Service incentive mechanism	Score	86.5 (80)	78.4 (80)	Ofwat methodology
F1	Non-household service incentive mechanism	Score	94.0 (80)	83.9 (80)	Ofwat methodology

*Note - 2017/18 performance represented here aligns to the old Dee Valley Water boundary.

A1 - Discoloured water contacts

We have continued our strong performance of improvement in the number of drinking water contacts we receive.

Performance has mainly been driven by continued focus on our mains flushing programme, targeted on those areas of the network most at risk of causing discolouration issues.

A2 - Mean zonal compliance

This is another strong area of performance although compliance for the year has dipped slightly to 99.97% from the exceptional performance in the previous year.

Looking forward, completing our programme of inspection and improvements at our service reservoirs will improve our ability to manage water quality risks.

B1 - Supply Interruptions

Within Chester we've had a really strong year on supply interruptions coming in well ahead of our commitment to customers.

There were at least 6 months without a single reportable supply interruption across the region, whilst the performance was dominated by a small number of incidents in a couple of months.

Our focus continues to be on managing pressures across the network, training our staff to ensure operations on the network have minimal impact on pressure transients and making use of technology where it can help predict possible issues. Whilst at all times our field teams are ready to respond if an incident occurs.

B2 - Leakage

Our customer research showed that this is a real issue for many of you - which is why we've committed to driving down leakage by 15% by 2025. And while we failed to reach our target this year, we've already put plans in place to improve our performance.

We worked hard to recover from the impact of the hot summer. Our focus was on identifying and fixing more leaks from pipe bursts, large and small. And the knock-on effect of this was that we also missed our target for reducing the number of burst mains (see below).

B3 - Security of supply index

We maintained our performance of 100% security of supply, primarily due to the level of resource resilience available on the River Dee.

B4 - Number of bursts

We have seen an increase in the number of bursts in the Chester region, partly caused by the hot, dry summer leading to movement in the soil conditions.

We continue to move forward with our mains replacement programme to improve the underlying asset health of our network in Chester which will help minimise the risk of mains bursts occurring in the first place.

C1 - Gross operational greenhouse gas emissions

We continue to see strong performance in this area as we met the greenhouse gas emissions target. Our use of green electricity and ongoing improvements in the efficiency of our operations, both in terms of electricity use and fuel/chemical use across our sites help keep our emissions as low as possible.

D1 - Customers' perception based on market research

We recognise that performance on this measure has reduced. We've improved our research questionnaire to give us more insight and a better foundation for the future, and we'll continue to listen to our customers and make it as easy as possible for them to talk to us. In fact we've been busy getting out into local towns and villages, making ourselves available to answer any questions customers might have on bills or anything else. We're actively encouraging customers to pop in and see as we visit locations throughout the region in Dolly, our roadshow vehicle.

E1 - Per capita consumption and water efficiency

This measure is designed to help us secure long term water supply. We will continue to push our performance by offering free meter installation for customers who would like one and school education programmes. While performance is below the target, we are still aiming to reach our goal by the end of the AMP.

E2/F1 - Service incentive mechanism/Non-household service incentive mechanism

We've seen continued improvements in our billing scores following the migration to the new system and the issues previously caused by direct debit conversion. Critically this has helped reduce the number of stage 2 complaints we have received. Our wider operational performance in Chester also helps minimise the number of complaints driven by interruptions in service.

Responsible, efficient investment

We've a proven track record in delivering sustainable efficiency. We know efficiency comes from finding new ways of doing things, making the right risk-based decisions based on high quality information, using commercial expertise drawn from other sectors, and making sure we secure a high quality outcome. Working with our stakeholders and suppliers is key - as is constantly challenging ourselves against a wide range of benchmarks.

We included over £400 million efficiency in our PR14 plan (representing a 7% saving on our AMP5 cost base), with around £390 million in the wholesale price controls. In order to deliver the required cost savings we've had to do a number of things differently:

- removing inefficiency from our processes through the application of well-established approaches and tools such as lean manufacturing;
- making the most of investments made in AMP5 including SAP (our Enterprise Resource Planning system) to reduce redundancy in our processes;
- using smarter technology and predictive analytics to reduce waste by proactively identifying potential issues before they became problems;
- becoming more energy efficient and generating more of our own energy including making the carbon triple pledge; and
- working with our supply chain partners to identify innovative solutions in part through working with a wider range of more specialist partners.

Having adopted this mindset throughout the company and our supply chain, we're set to deliver a further £480 million of cost savings. These have been achieved by streamlining the organisational structure across the whole company, driving further contracting efficiencies on our capital programme, identifying new ways of doing things to operate more effectively and making more of the totex framework to identify optimal solutions.

The £870 million AMP6 efficiency reported in the Annual Report and Accounts (ARA) compares how we have performed relative to our AMP5 costs at an appointee level. This has enabled us to be more responsive in dealing with issues as they have arisen, for example we've been able to reinvest in our assets to achieve the levels of performance we committed to our customers.

After adjusting for the above reinvestment, efficiencies already baked into our PR14 plan and further efficiencies applied by Ofwat, the forecast outperformance against our wholesale plan is £480 million. This means we're on track to deliver around 3% outperformance. Within this, we expect waste water will outperform by around 12% while water will be 7% above the FD. While we've driven efficiencies in both services, we've recognised the need to make more service delivery improvements on our water service.

Excluding depreciation, which is the result of the additional investment we've made to improve customer service, we have cemented our upper quartile (UQ) position in retail. We entered AMP6 in a mid-ranking position and we're on track to generate 15% efficiency by 2020 (on a like-for-like basis on our 2015 average cost to serve). Management of bad debt has been a key focus and strong performing area for us for a number of years through constant effort and investment

Regulatory accounts for the year ended 31 March 2019

Independent Auditors' report to the Water Services Regulation Authority (the WSRA) and the Directors of Severn Trent Water Limited

Report on the audit of the Regulatory Accounting Statements

Opinion

We have audited certain sections of Severn Trent Water Limited's ('the Company') Annual Performance Report for the year ended 31 March 2019 ('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) 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 capital 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) and the related notes.

We have not audited the Outcome performance table (tables 3A to 3S), Table 1F (financial flows) and the additional regulatory information in tables 4A to 4W.

In our opinion, Severn Trent Water Limited's Regulatory Accounting Statements within the Annual Performance Report have been prepared, in all material aspects, in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA (RAG 1.08, RAG 2.07, RAG 3.11, RAG 4.08 and RAG 5.07) and the accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.11, appendix 2), set out on page 76 to 77.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ('ISAs (UK)'), including ISA (UK) 800, and applicable law and having regard to the guidance contained in ICAEW Technical Release Tech 02/16 AAF 'Reporting to Regulators on Regulatory Accounts'.

Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the Regulatory Accounting Statements 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 Condition F, the Regulatory Accounting Guidelines, the accounting policies (including the Company's published accounting methodology statement, 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 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 has not been prepared under the basis of International Financial Reporting Standards as adopted by the European Union ('IFRSs'). Financial information other than that prepared on the basis of IFRSs 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 on pages 62 to 88 have been drawn up in accordance with Regulatory Accounting Guidelines with a number of departures from IFRS. A summary of the effect of these departures from Generally Accepted Accounting Practice in the Company's statutory financial statements is included in the tables within section 1.

The Regulatory Accounting Statements are prepared in accordance with a special purpose framework for the specific purpose as described in the Responsibilities for the Regulatory Accounting Statements section below. As a result, the Regulatory Accounting Statements may not be suitable for another purpose.

Our opinion is not modified in respect of this matter.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (UK) require us to report to you where:

- the Directors' use of the going concern basis of accounting in the preparation of the Regulatory Accounting Statements is not appropriate; or
- the Directors have not disclosed in the Regulatory Accounting Statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the Regulatory Accounting Statements are authorised for issue.

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, except to the extent otherwise explicitly stated in our report, 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 such material inconsistencies or apparent material misstatements, we are required to determine 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, we are required to report that fact.

We have nothing to report based on these responsibilities.

Responsibilities of the Directors for the Regulatory Accounting Statements

As explained more fully in the Statement of Directors' Responsibilities set out on page 28, the Directors are responsible for the preparation of the Regulatory Accounting Statements in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA and the Company's accounting policies (including the Company's published accounting methodology statement(s), as defined in RAG 3.11, appendix 2).

The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of the Regulatory Accounting Statements that are

free from material misstatement, whether due to fraud or error.

In preparing the Regulatory Accounting Statements 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

Our objectives are to obtain reasonable assurance about whether the Regulatory Accounting Statements 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 these Regulatory Accounting Statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

Opinion on other matters prescribed by Condition F

Under the terms of our contract we have assumed responsibility to provide those additional opinions required by Condition F in relation to the accounting records. In our opinion:

- proper accounting records have been kept by the appointee as required by paragraph 3 of Condition F; and
- the Regulatory Accounting Statements are in agreement with the accounting records and returns retained for the purpose of preparing the Annual Performance Report.

Use of this report

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

Our opinion on the Regulatory Accounting Statements is separate from our opinion on the statutory financial statements of the Company for the year ended 31 March 2019 on which we reported on 20 May 2019, 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.

Deloitte LLP

Birmingham, United Kingdom

25 November 2019

1A - Income statement

Year ended 31 March 2019

Line description		Adjustments			
		Statutory	Differences between statutory and RAG definitions	Non-appointed	Total appointed activities
		£m	£m	£m	£m
1A.1	Revenue	1673.108	-46.698	-13.806	1612.604
1A.2	Operating costs	-1115.401	24.961	4.051	-1086.389
1A.3	Other operating income	0.000	10.645	0.000	10.645
1A.4	Operating profit	557.707	-11.092	-9.755	536.860
1A.5	Other income	0.000	16.531	-0.181	16.350
1A.6	Interest income	62.971	-62.718	0.000	0.253
1A.7	Interest expense	-251.780	41.217	0.005	-210.558
1A.8	Other interest expense	0.000	-12.536	0.000	-12.536
1A.9	Profit before tax and fair value movements	368.898	-28.598	-9.931	330.369
1A.10	Fair value gains/(losses) on financial instruments	37.673	0.000	0.000	37.673
1A.11	Profit before tax	406.571	-28.598	-9.931	368.042
1A.12	UK corporation tax	-34.189	-1.776	1.887	-34.078
1A.13	Deferred tax	-37.015	6.048	0.000	-30.967
1A.14	Profit for the year	335.367	-24.326	-8.044	302.997
1A.15	Dividends	-225.054	0.000	8.044	-217.010
A	Tax analysis				
1A.16	Current year	40.175	1.558	-1.887	39.846
1A.17	Adjustments in respect of prior years	-5.986	0.218	0.000	-5.768
1A.18	UK Corporation tax	34.189	1.776	-1.887	34.078
B	Analysis of non-appointed revenue				
1A.19	Imported sludge	0.685			
1A.20	Tankered waste	7.552			
1A.21	Other non-appointed revenue	5.569			
1A.22	Revenue	13.806			

The differences between statutory and RAG definitions are outlined in the following table:

	Adjustments				Reclassifications				
	Biogas impairment	Exclude Hafren Dyfrdwy	Capitalisation of interest and related depreciation	Share of Group pension scheme	External power, gas and sludge products income	Developer services & repair of damages recharges	Profit on fixed asset disposals, non-operating income and deferred credits	Pension scheme net interest costs	Total differences
	£m	£m	£m	£m	£m	£m	£m	£m	£m
Revenue	-	(29.426)	-	-	(20.726)	3.454	-	-	(46.698)
Operating costs	(0.500)	32.014	2.551	0.800	20.726	(3.454)	(27.176)	-	24.961
Other operating income	-	-	-	-	-	-	10.645	-	10.645
Operating profit	(0.500)	2.588	2.551	0.800	-	-	(16.531)	-	(11.092)
Other income	-	-	-	-	-	-	16.531	-	16.531
Interest income	-	(1.700)	-	-	-	-	-	(61.018)	(62.718)
Interest expense	-	(1.865)	(31.472)	-	-	-	-	74.554	41.217
Other interest expense	-	-	-	1.000	-	-	-	(13.536)	(12.536)
Profit before tax and fair value movements	(0.500)	(0.977)	(28.921)	1.800	-	-	-	-	(28.598)
Fair value losses on financial instruments	-	-	-	-	-	-	-	-	-
Profit before tax	(0.500)	(0.977)	(28.921)	1.800	-	-	-	-	(28.598)
UK corporation tax	-	(1.776)	-	-	-	-	-	-	(1.776)
Deferred tax	-	1.438	4.916	(0.306)	-	-	-	-	6.048
Profit for the year	(0.500)	(1.315)	(24.005)	1.494	-	-	-	-	(24.326)

1B - Statement of comprehensive income

Year ended 31 March 2019

Line description	Statutory	Adjustments			Total appointed activities
		Differences between statutory and RAG definitions	Non-appointed	Total adjustments	
	£m	£m	£m	£m	£m
1B.1 Profit for the year	335.367	-24.326	-8.044	-32.370	302.997
1B.2 Actuarial gains/(losses) on post employment plans	45.839	-7.770	0.000	-7.770	38.069
1B.3 Other comprehensive income	-0.305	0.000	0.000	0.000	-0.305
1B.4 Total comprehensive income for the year	380.901	-32.096	-8.044	-40.140	340.761

The differences between statutory and RAG definitions are outlined in the following table:

	Per income statement	Exclude Hafren Dyfrdwy	Net actuarial difference on retirement benefit obligations	Deferred tax on movement on retirement benefit obligations	Total differences
	£m	£m	£m	£m	£m
Profit for the year	(24.326)	-	-	-	(24.326)
Actuarial losses on retirement benefit obligations	-	(0.383)	(8.900)	1.513	(7.770)
Total	(24.326)	(0.383)	(8.900)	1.513	(32.096)

1C - Statement of financial position

Year ended 31 March 2019

Line description	Statutory	Adjustments			Total appointed activities
		Differences between statutory and RAG definitions	Non-appointed	Total adjustments	
	£m	£m	£m	£m	£m
A Non-current assets					
1C.1 Fixed assets	8903.330	-358.687	0.000	-358.687	8544.643
1C.2 Intangible assets	152.996	-71.942	0.000	-71.942	81.054
1C.3 Investments - loans to Group companies	187.980	45.951	0.000	45.951	233.931
1C.4 Investments - other	1510.800	218.319	0.000	218.319	1729.119
1C.5 Financial instruments	68.414	0.000	0.000	0.000	68.414
1C.6 Retirement benefit assets	18.644	-18.644	0.000	-18.644	0.000
1C.7 Total non-current assets	10842.164	-185.003	0.000	-185.003	10657.161
B Current assets					
1C.8 Inventories	10.589	-0.522	0.000	-0.522	10.067
1C.9 Trade and other receivables	472.608	6.553	0.000	6.553	479.161
1C.10 Financial instruments	0.115	0.000	0.000	0.000	0.115
1C.11 Cash & cash equivalents	12.867	-0.350	0.000	-0.350	12.517
1C.12 Total current assets	496.179	5.681	0.000	5.681	501.860
C Current liabilities					
1C.13 Trade and other payables	-460.784	109.700	0.000	109.700	-351.084
1C.14 Capex creditor	0.000	-90.793	0.000	-90.793	-90.793
1C.15 Borrowings	-196.012	0.612	0.000	0.612	-195.400
1C.16 Financial instruments	0.000	0.000	0.000	0.000	0.000
1C.17 Current tax liabilities	-11.098	-6.725	0.000	-6.725	-17.823
1C.18 Provisions	-15.338	0.000	0.000	0.000	-15.338
1C.19 Total current liabilities	-683.232	12.794	0.000	12.794	-670.438
1C.20 Net current assets/(liabilities)	-187.053	18.475	0.000	18.475	-168.578
D Non-current liabilities					
1C.21 Trade and other payables	-1075.899	1075.592	0.000	1075.592	-0.307
1C.22 Borrowings	-5734.752	0.107	0.000	0.107	-5734.645
1C.23 Financial instruments	-119.285	0.000	0.000	0.000	-119.285
1C.24 Retirement benefit obligations	-462.920	31.400	0.000	31.400	-431.520
1C.25 Provisions	-8.984	0.000	0.000	0.000	-8.984
1C.26 Deferred income - grants and contributions	0.000	-734.707	0.000	-734.707	-734.707
1C.27 Deferred income - adopted assets	0.000	-347.772	0.000	-347.772	-347.772
1C.28 Preference share capital	0.000	0.000	0.000	0.000	0.000
1C.29 Deferred tax	-735.125	34.336	0.000	34.336	-700.789
1C.30 Total non-current liabilities	-8136.965	58.956	0.000	58.956	-8078.009
1C.31 Net assets	2518.146	-107.572	0.000	-107.572	2410.574
E Equity					
1C.32 Called up share capital	1.050	0.000	0.000	0.000	1.050
1C.33 Retained earnings and other reserves	2517.096	-107.572	0.000	-107.572	2409.524
1C.34 Total Equity	2518.146	-107.572	0.000	-107.572	2410.574

The differences between statutory and RAG definitions are outlined in the following table:

	Adjustments				Reclassifications			
	Biogas impairment	Capitalisation of interest	Exclude Hafren Dyfrdwy	Share of group pension scheme	Non-current trade receivables reclassification	Capital creditor reclassification	Deferred income reclassification	Total differences
	£m	£m	£m	£m	£m	£m	£m	£m
Non-current assets								
Fixed assets	-	-137.683	-221.004	-	-	-	-	-358.687
Intangible assets	-	-	-71.942	-	-	-	-	-71.942
Investments - loans to group companies	-	-	49.051	-	-3.100	-	-	45.951
Investments - other	0.500	-	217.819	-	-	-	-	218.319
Financial instruments	-	-	-	-	-	-	-	-
Retirement benefit assets	-	-	-18.644	-	-	-	-	-18.644
Total non-current assets	0.500	-137.683	-44.720	-	-3.100	-	-	-185.003
Current assets								
Inventories	-	-	-0.522	-	-	-	-	-0.522
Trade and other receivables	-	-	3.453	-	3.100	-	-	6.553
Financial instruments	-	-	-	-	-	-	-	-
Cash and cash equivalents	-	-	-0.350	-	-	-	-	-0.350
Total current assets	-	-	2.581	-	3.100	-	-	5.681
Current liabilities								
Trade and other payables	-	-	0.183	-	-	90.793	18.724	109.700
Capex creditor	-	-	-	-	-	-90.793	-	-90.793
Borrowings	-	-	0.612	-	-	-	-	0.612
Financial instruments	-	-	-	-	-	-	-	-
Current tax liabilities	-	-	-6.725	-	-	-	-	-6.725
Provisions	-	-	-	-	-	-	-	-
Total current liabilities	-	-	-5.930	-	-	-	18.724	12.794
Net current assets/(liabilities)	-	-	-3.349	-	3.100	-	18.724	18.475
Non-current liabilities								
Trade and other payables	-	-	11.837	-	-	-	1,063.755	1,075.592
Borrowings	-	-	0.107	-	-	-	-	0.107
Financial instruments	-	-	-	-	-	-	-	-
Retirement benefit obligations	-	-	-	31.400	-	-	-	31.400
Provisions	-	-	-	-	-	-	-	-
Deferred income - grants and contributions	-	-	-	-	-	-	-734.707	-734.707
Deferred income - adopted assets	-	-	-	-	-	-	-347.772	-347.772
Preference share capital	-	-	-	-	-	-	-	-
Deferred tax	-	23.970	15.696	-5.330	-	-	-	34.336
Total non-current liabilities	-	23.970	27.640	26.070	-	-	-18.724	58.956
Net assets	0.500	-113.713	-20.429	26.070	-	-	0.000	-107.572
Equity								
Called up share capital	-	-	-	-	-	-	-	-
Retained earnings and other reserves	0.500	-113.713	-20.429	26.070	-	-	-	-107.572
Total equity	0.500	-113.713	-20.429	26.070	-	-	-	-107.572

1D - Statement of cash flows

Year ended 31 March 2019

Line description	Statutory	Adjustments			Total appointed activities
		Differences between statutory and RAG definitions	Non-appointed	Total adjustments	
	£m	£m	£m	£m	£m
A Statement of cashflows					
1D.1 Operating profit	557.707	-11.092	-9.755	-20.847	536.860
1D.2 Other income	0.000	2.228	-0.181	2.047	2.047
1D.3 Depreciation	338.290	-9.287	0.000	-9.287	329.003
1D.4 Amortisation - grants and contributions	-14.502	14.502	0.000	14.502	0.000
1D.5 Changes in working capital	-48.538	3.280	0.000	3.280	-45.258
1D.6 Pension contributions	-34.500	0.339	0.000	0.339	-34.161
1D.7 Movement in provisions	21.097	-1.598	0.000	-1.598	19.499
1D.8 Profit on sale of fixed assets	-10.645	0.000	0.000	0.000	-10.645
1D.9 Cash generated from operations	808.909	-1.628	-9.936	-11.564	797.345
1D.10 Net interest paid	-161.900	4.206	0.005	4.211	-157.689
1D.11 Tax paid	-20.900	0.648	1.887	2.535	-18.365
1D.12 Net cash generated from operating activities	626.109	3.226	-8.044	-4.818	621.291
B Investing activities					
1D.13 Capital expenditure	-804.300	15.598	0.000	15.598	-788.702
1D.14 Grants and contributions	40.100	-0.764	0.000	-0.764	39.336
1D.15 Disposal of fixed assets	11.800	0.000	0.000	0.000	11.800
1D.16 Other	0.002	1.200	0.000	1.200	1.202
1D.17 Net cash used in investing activities	-752.398	16.034	0.000	16.034	-736.364
1D.18 Net cash generated before financing activities	-126.289	19.260	-8.044	11.216	-115.073
C Cashflows from financing activities					
1D.19 Equity dividends paid	-225.054	0.000	8.044	8.044	-217.010
1D.20 Net loans received	359.750	-18.900	0.000	-18.900	340.850
1D.21 Cash inflow from equity financing	0.000	0.000	0.000	0.000	0.000
1D.22 Net cash generated from financing activities	134.696	-18.900	8.044	-10.856	123.840
1D.23 Increase (decrease) in net cash	8.407	0.360	0.000	0.360	8.767

The differences between statutory and RAG definitions are outlined in the following table:

	Biogas impairment	Depreciation on capitalised interest	Exclude Hafren Dyfrdwy	Share of Group pension scheme	Non-operating income reclassification	Total differences
	£m	£m	£m	£m	£m	£m
Statement of cashflows						
Operating profit	(0.500)	2.551	2.588	0.800	(16.531)	(11.092)
Other income	-	-	-	-	2.228	2.228
Depreciation	-	(2.551)	(6.736)	-	-	(9.287)
Amortisation - grants and contributions	-	-	0.199	-	14.303	14.502
Changes to working capital	-	-	3.280	-	-	3.280
Pension contributions	-	-	0.339	-	-	0.339
Movements in provisions	-	-	(0.798)	(0.800)	-	(1.598)
Profit on sale of fixed assets	-	-	-	-	-	-
Cash generated from operations	(0.500)	-	(1.128)	-	-	(1.628)
Net interest paid	-	-	4.206	-	-	4.206
Tax paid	-	-	0.648	-	-	0.648
Net cash generated from operating activities	(0.500)	-	3.726	-	-	3.226
Investing activities						
Capital expenditure	-	-	15.598	-	-	15.598
Grants and contributions	-	-	(0.764)	-	-	(0.764)
Disposal of fixed assets	-	-	-	-	-	-
Other	-	-	1.200	-	-	1.200
Net cash used in investing activities	-	-	16.034	-	-	16.034
Net cash generated before financing activities	(0.500)	-	19.760	-	-	19.260
Cashflows from financing activities						
Equity dividends paid	-	-	-	-	-	-
Net loans received	-	-	(18.900)	-	-	(18.900)
Cash outflow from equity financing	-	-	-	-	-	-
Net cash generated from financing activities	-	-	(18.900)	-	-	(18.900)
Increase/(Decrease) in net cash	(0.500)	-	0.860	-	-	0.360

1E - Net debt analysis

Year ended 31 March 2019

Line description	Interest rate risk profile			Total £m
	Fixed rate £m	Floating rate £m	Index-linked £m	
1E.1 Borrowings (excluding preference shares)	3517.944	986.038	1365.619	5869.601
1E.2 Preference share capital				0.000
1E.3 Total borrowings				5869.601
1E.4 Cash				-12.517
1E.5 Short term deposits				0.000
1E.6 Net debt				5857.084
1E.7 Gearing				63.72%
1E.8 Adjusted gearing				62.30%
1E.9 Full year equivalent nominal interest cost	130.723	25.284	70.076	226.083
1E.10 Full year equivalent cash interest payment	130.723	25.284	26.962	182.969
A Indicative interest rates				
1E.11 Indicative weighted average nominal interest rate	3.70%	2.60%	5.10%	3.90%
1E.12 Indicative weighted average cash interest rate	3.70%	2.60%	2.00%	3.10%
1E.13 Weighted average years to maturity	8.60	7.03	28.86	13.05

The differences between statutory and RAG definitions are outlined in the following table:

	Total £m
Current borrowings	196.012
Non-current borrowings	5,734.752
Severn Trent Water Group borrowings	5,930.764
Less: Hafren Dyfrdwy external debt	-0.719
Borrowings per 1C.15 and 1C.22	5,930.045
Less: fair value adjustment on Artesian debt	-31.681
Less: fair value of hedge accounting adjustments	-28.763
Borrowings per 1E.1	5,869.601
Cash and cash equivalents	-12.517
Net debt per 1E.7 gearing	5,857.084
Loan receivable from Severn Trent Plc	-80.600
Loan receivable from Hafren Dyfrdwy	-49.051
Net debt per 1E.8 adjusted gearing	5,727.433

1F - Financial flows

Year ended 31 March 2019

Line description	12 Months ended 31 March 2019					
	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
	%	%	%	£m	£m	£m
A Statement of cashflows						
1F.1 Return on regulatory equity	5.60%	5.64%	5.60%	163.668	165.021	165.021
1F.2 Actual performance adjustment 2010-15	-0.64%	-0.65%	-0.64%	-18.748	-18.903	-18.903
1F.3 Adjusted Return on regulatory equity	4.95%	5.00%	4.95%	144.920	146.117	146.117
1F.4 Regulatory equity	2924.910	2924.910	2949.078			
B Financing						
1F.5 Gearing	0.00%	-0.03%	-0.03%	0.000	-0.795	-0.795
1F.6 Variance in corporation tax	0.00%	-0.42%	-0.42%	0.000	-12.275	-12.275
1F.7 Group relief	0.00%	0.00%	0.00%	0.000	0.000	0.000
1F.8 Cost of debt	0.00%	2.33%	2.31%	0.000	68.148	68.148
1F.9 Hedging instruments	0.00%	0.28%	0.27%	0.000	8.088	8.088
1F.10 Financing total	4.95%	7.16%	7.10%	144.920	209.283	209.283
C Operational performance						
1F.11 Totex out/(under) performance	0.00%	-0.13%	-0.13%	0.000	-3.703	-3.703
1F.12 ODI out/(under) performance	0.00%	-0.11%	-0.11%	0.000	-3.303	-3.303
1F.13 Retail out/(under) performance	0.00%	0.31%	0.31%	0.000	9.051	9.051
1F.14 Other exceptional items	0.00%	0.00%	0.00%	0.000	0.000	0.000
1F.15 Operational performance total	0.00%	0.07%	0.07%	0.000	2.045	2.045
1F.16 Total earnings	4.95%	7.23%	7.17%	144.920	211.328	211.328
1F.17 RCV growth from RPI inflation	3.06%	3.06%	3.06%	89.375	89.375	90.114
1F.18 Total shareholder return	8.01%	10.28%	10.22%	234.295	300.703	301.442
1F.19 Net dividend	4.00%	6.20%	6.15%	116.996	181.436	181.436
1F.20 Retained value	4.01%	4.08%	4.07%	117.299	119.267	120.006
D Dividends reconciliation						
1F.21 Gross dividend	4.00%	6.41%	6.36%	116.996	187.417	187.417
1F.22 Interest received on intercompany loans	0.00%	0.20%	0.20%	0.000	5.981	5.981
1F.23 Net dividend	4.00%	6.20%	6.15%	116.996	181.436	181.436

Notional returns and notional regulatory equity %	Actual returns and notional regulatory equity %	Average 2015-19			
		Actual returns and actual regulatory equity %	Notional returns and notional regulatory equity £m	Actual returns and notional regulatory equity £m	Actual returns and actual regulatory equity £m
5.63%	5.70%	5.63%	158.997	161.117	161.117
-0.47%	-0.48%	-0.47%	-13.381	-13.560	-13.560
5.16%	5.22%	5.16%	145.616	147.558	147.558
2824.240	2824.240	2861.903			
0.00%	-0.08%	-0.08%	0.000	-2.197	-2.197
0.00%	-0.12%	-0.11%	0.000	-3.279	-3.279
0.00%	0.00%	0.00%	0.000	0.000	0.000
0.00%	0.96%	0.94%	0.000	26.992	26.992
0.00%	0.42%	0.41%	0.000	11.793	11.793
5.16%	6.40%	6.32%	145.616	180.867	180.867
0.00%	0.85%	0.84%	0.000	23.930	23.930
0.00%	0.99%	0.98%	0.000	27.965	27.965
0.00%	0.53%	0.53%	0.000	15.038	15.038
0.00%	0.10%	0.09%	0.000	2.696	2.696
0.00%	2.47%	2.43%	0.000	69.629	69.629
5.16%	8.87%	8.75%	145.616	250.496	250.496
2.50%	2.50%	2.50%	70.621	70.621	71.563
7.66%	11.37%	11.22%	216.237	321.117	322.059
4.00%	7.25%	7.15%	112.970	204.724	204.724
3.66%	4.12%	4.10%	103.267	116.393	117.335
4.00%	7.34%	7.25%	112.970	207.361	207.361
0.00%	0.09%	0.09%	0.000	2.637	2.637
4.00%	7.25%	7.15%	112.970	204.724	204.724

1F - Financial flows

Year ended 31 March 2019

We are very supportive of Ofwat's financial flows measure. It provides much greater transparency on how returns are earned and outperformance is shared. The measure compares the financial flows between the actual company structure and the notional structure assumed in the Final Determination (FD).

Total shareholder returns calculated in the financial flows comprise:

- the return on regulatory equity (RoRE) adjusted for 2010-15 actual performance
- financing and operational performance and
- the growth in the RCV.

We discuss the key components in detail below.

Regulatory equity

As explained in the commentary to table 4H - Financial metrics, the base return of 5.7% set in the FD has been adjusted by 0.1% to exclude the non-household retail return as a result of exiting the non-household market. A minor adjustment of 0.02% has also been made for the apportionment of the base return resulting from the border variation.

The regulatory equity is the proportion of the RCV that is not financed by debt. In our financial flows calculations we have used the regulatory equity values published by Ofwat. However as discussed with Ofwat there are two issues with the published regulatory equity values for years 2015-16 and 2018-19 which we are highlighting in the interests of transparency;

- The actual regulated equity for 2015-16 is calculated using the average reported gearing for years 2014-15 and 2015-16. For 2014-15, Ofwat have used the reported gearing for Severn Trent Water on a standalone company basis rather than the reported gearing for the consolidated group company (which forms the basis of the regulated ring fenced company). The gearing assumption used for 2014-15 is therefore on an inconsistent basis with the gearing assumptions used for all the other years in the financial flows and as reported in table 1E. The impact of the inconsistent gearing assumption results in the 2015-16 regulated equity being understated by £179 million, or 7%.
- Due to the border variation, the 2018-19 and 2019-20 FD RCVs for Severn Trent Water and Dee Valley were reapportioned between Severn Trent Water and Hafren Dyfrdwy. A query has been raised, as the opening RCV agreed as part of the NAV process, which is used to calculate the 2018-19 average RCV appears to be understated by £30.3 million (in 2012-13 prices), or 0.4%. In the absence of an agreed position we have applied the published value to ensure the data can be clearly tracked back to Ofwat's publications.

Financing

This component of financial flows covers performance on financing and corporation tax.

With the continued benefits of low cost of debt and our effective strategy of replacing expensive fixed rate debt with new low cost debt, our real cost of debt is 1.9% lower than the FD assumption. There is also a small benefit of £8.0 million relating to the impact of interest rate swaps on our cost of debt.

As our actual average gearing (62.1%) is marginally lower than Ofwat's FD gearing assumption, there is a minor offsetting adjustment of £0.8 million on financing performance.

For the reporting year, our actual current tax is £12.3 million higher than allowed in the FD (i.e. we paid more tax than was assumed). This was mainly due to the asset transfers relating to the border variation and capital allowances in excess of depreciation being lower than the forecast in the FD. There was no outperformance in the year relating to group relief.

Operational performance

The operational performance component of financial flows covers performance on wholesale totex, retail costs and ODIs.

Our wholesale totex performance is explained in detail in table 4B. For the current year, totex performance reflects £3.8 million of additional spend relative to the FD. The additional spend reflects the reinvestment of some of our outperformance and the reversal of timing differences relating to reported capital expenditure compared to the profile of spend in the FD.

Performance on retail costs is explained in the narrative to table 2C. Further retail cost reductions were delivered during the year resulting in us outperforming the FD by £9.1 million.

As explained in the performance commentary, the waste water ODI cap was reached during the year. Ofwat agreed to extend the cap and we locked in the benefits we had delivered to customers by accepting more stretching targets for the key waste water measures for the remainder of the AMP. Despite the additional stretch in the revised targets, we still earned a reward of £5.0 million on our waste water ODIs, reflecting exceptional delivery for customers. Our overall performance on water ODIs however, resulted in a total ODI penalty of £3.1 million.

Total shareholder returns

Our overall strong financial and operational performance over the AMP has generated on average £103 million per year in additional returns for shareholders. Including the base return of £148 million and the growth in the RCV from inflation (£72 million) results in total shareholder returns over the AMP to date on average of £322 million per year, equivalent to 11.3%.

We have distributed, on average over the AMP, 7.2% (of the 11.3% earned returns) to shareholders, with the remaining 4.1% retained within the business. The retained value of 4.1% over the AMP to date is higher than the retained value of 3.7% under Ofwat's assumed notional structure.

Current tax reconciliation

Year ended 31 March 2019

A reduction in the UK corporation tax rate to 17% (effective from 1 April 2020) was substantively enacted on 6 September 2016. The deferred tax liability at 31 March 2019 was calculated based on the rate of 17% substantively enacted at the balance sheet date. This has resulted in an overall deferred tax charge in the income statement.

The tax charge for the year ended 31 March 2019 is lower than the standard rate of corporation tax in the UK.

The differences to the standard rate of corporation tax and the reconciliation to the current tax charge allowed in price limits are outlined in the below table:

	Actual £m	FD £m	Variance £m
Profit on ordinary activities before tax	368.042	235.901	132.141
Tax at the standard rate of corporation tax in the UK 19% (FD 20%)	69.928	44.821	25.107
Tax effect of (income not taxable)/expenditure not deductible in determining taxable profits	-3.823	0.747	-4.570
Capital allowances in excess of depreciation	-23.196	-26.211	3.015
Other temporary differences	-3.063	-0.485	-2.578
Impact of change in tax rate	-	0.993	-0.993
Current tax charge before prior year adjustments	39.846	19.865	19.981
Prior year adjustment	-5.768	-	-5.768
Current tax charge after prior year adjustments	34.078	19.865	14.213

The appointed current tax charge for the appointed business is higher than the total tax charge allowed in price limits due to the net impact of the following:

- The licence change in the year involved the transfer of Severn Trent's customers and assets in Powys and Monmouthshire to our Welsh licence with the previous Dee Valley customers and assets in Chester were transferred to Severn Trent's English licence.
- The Final Determination profit before tax for both companies has been reallocated on the basis of the RCV for Wholesale and been reallocated on the basis of the change in the customer numbers for Retail.
- Whilst the changes in licence resulted in significant changes in Hafren Dyfrdwy results, the effect has been less material for Severn Trent Water. Profit before tax has increased primarily due to operating expenditure efficiencies and a lower effective interest rate on financing.
- Non-taxable fair value movements on investments which are not included in the assessment of permanent differences within the FD tax charge.
- Capital allowances in excess of depreciation within the appointed business are lower than the level forecast within the FD following a review of the expenditure as it has actually been incurred.
- The taxation of fair value movements on financial instruments that are not otherwise included in the assessment of temporary differences within the FD tax charge.
- The prior year adjustment within the appointed business of £5.8 million reflects the agreement of prior years tax matters with HMRC.

Factors that will impact future tax charges will include:

- Planned reductions in corporation tax rates;
- Fair value movements on derivative financial instruments;
- Fair value movements on investments; and
- Any changes in tax legislation or practice not reflected in the FD.

We are committed to paying the right amount of tax at the right time. As well as corporation tax on profits, which is included in the tax charge in our accounts, we incur a range of taxes, charges and levies imposed by government agencies, including business rates, employers national insurance and environmental taxes.

Notes to the Regulatory Accounts

1. Regulatory reporting

The regulatory accounts as reported on pages 58 to 88 should be read in conjunction with the financial review set out on pages 39 to 46 of the consolidated Severn Trent Water Limited Annual Report and Accounts 2019 to aid understanding of the performance of the business.

a) Differences in recognition and measurement between statutory and regulatory financial accounts

i) Borrowing costs

Borrowing costs where directly related to the construction of an asset are capitalised in the statutory accounts. These amounts are not capitalised in the regulatory financial reporting statements in accordance with the RAGs.

ii) Treatment of the defined benefit pension costs

The statutory accounts include the full cost and net deficit of the Severn Trent Group's defined benefit pension schemes, whereas the regulatory accounts include only Severn Trent Water's share of the costs and net deficit. This creates a difference in operating costs and net finance costs in the income statement, actuarial gains and losses in other comprehensive income, and the retirement benefit obligation on the balance sheet. A difference in deferred tax has also arisen as a result of this accounting treatment.

iii) Hafren Dyfrdwy Cyfyngedig results

The full year results of Hafren Dyfrdwy Cyfyngedig are included in the Severn Trent Water Group results in

2018/19. The Hafren Dyfrdwy entity results and related consolidation entries are excluded from the regulatory accounts.

iv) Impairment

An adjustment relating to the strike off of a dormant subsidiary.

b) Differences in presentation between statutory and regulatory financial accounts

i) Revenue and cost classification

Certain items which are netted off against operating costs within the statutory accounts are grossed up and shown as revenue for regulatory reporting. This includes developer contributions for administration costs incurred in relation to new connections and recharges for costs of repair from damages. Other items such as income from renewable energy incentives are shown as revenue in the statutory accounts and negative operating costs for regulatory reporting.

c) Difference in presentation of specific items required to be separately disclosed in the regulatory financial statements

i) Profit or loss on disposal of fixed assets and non-operating income are included in operating costs in the statutory accounts but are shown as separate line items in the regulatory financial statements.

ii) Interest income and costs relating to defined benefit

pension schemes are included in finance income or cost respectively in the statutory accounts but are shown as other interest expense in the regulatory accounts.

iii) The capex creditor and deferred income from grants and contributions and adopted assets included within trade and other payables in the statutory accounts are shown as separate items in the regulatory accounts.

iv) Intra-group loans due in more than one year recorded as trade receivables in the statutory accounts are reclassified to investments. All other non current trade and other receivables are reclassified to current assets.

d) Price control segments

The regulatory accounts have been prepared in accordance with RAG 2.07 'Guideline for classification of costs across the price controls'.

The section 2 data tables have been prepared in accordance with our Accounting Separation Methodology Statement which can be found at stwater.co.uk. Our methodology statement explains the basis for allocation of operating and capital expenditure and has been updated for changes to the requirements in the year. Wherever possible, direct costs and assets have been directly attributed to price controls. Where this is not possible, appropriate cost allocations have been applied as described in the methodology. Material changes to the allocation approach compared to the previous year are documented in the methodology statement.

2. Accounting policies

a) Basis of preparation

The regulatory financial statements are separate from the statutory financial statements of the company. They have been prepared on a going concern basis as set out in the Governance Report of the consolidated Severn Trent Water Limited Annual Report and Accounts 2019 on page 54.

The regulatory financial statements have been prepared in accordance with Condition F of the Instruments of Appointment of the Water and Sewerage Undertakers and the Regulatory Accounting Guidelines as issued by the WSRA.

b) Revenue recognition

Turnover represents income receivable from regulated water and waste water activities, excluding value added tax. The company has adopted IFRS 15 'Revenue from Contracts with Customers' during the year. There have been no changes to the recognition of revenue as a result.

Turnover includes an estimate of the amount of mains water and waste water charges unbilled at the year end. The accrual is estimated using a defined methodology based upon a measure of unbilled water consumed by tariff, which is calculated from historical billing information. There have been no changes in methodology in the year.

The Water Industry Act 2014, Chapter 1 A 'Licensing of Water Suppliers' describes the duties imposed on a water and sewerage undertaker and the licence conditions involved. Regulated activities are consequently those activities that are necessary in order for the appointee to fulfil the functions and duties of a water and sewerage undertaker.

Non-appointed income primarily consists of tankered trade waste income, car park income and marketing income.

Turnover is not recognised in respect of unoccupied properties. Properties are classified as unoccupied when:

- The company is informed that a customer has left a property and it is not expected to be reoccupied immediately;
- New properties are connected but are not occupied;
- Properties are disconnected following a customer's request; or
- The identity of the customer is unknown.

The following activities are undertaken to ensure properties classified as unoccupied are in fact not occupied:

Where the company is informed that the customer has left a property and the property is expected to be occupied by someone else, a welcome letter is sent to the property encouraging the occupier to contact the company.

If there is no response to the welcome letter within two months a void letter is sent to the property explaining that we have classified the property as empty and may schedule the property for disconnection.

Meter readings are taken for metered unoccupied properties; where consumption is recorded, a letter is sent to the property.

Inspections are organised throughout the year by geographical area.

c) Bad debts

Provisions are charged to operating costs to reflect the company's assessment of the risk of non-recoverability of debtors. In the prior year this was calculated based on the age of the debtor balance and the company's previous collection experience for balances of that age. In the current year, the company has adopted IFRS 9 'Financial Instruments' and the provision has now been recognised based on the lifetime expected credit losses for future receivables. The bad debt charge or provision are not materially different as a result.

Write offs in relation to court or debt recovery costs are not included.

Debt can only be written off if it is a legitimate charge against the debtor (if it is considered that part or all of the debt is incorrect or unsubstantiated, then such elements are dealt with through the issue of a credit note) and if one of the following criteria is met:

- The customer does not have any assets or has insufficient assets on which to levy execution;
- The customer is bankrupt and no dividend has been, or is likely to be, received;
- The customer has died without leaving an estate or has left an insufficient estate on which to levy execution and the company has been unable to prove its case in court; or
- All available economic options for collection of the debt have been pursued or that debt recovery procedures have proved to be ineffective or uneconomic to continue.

- Uneconomic circumstances are those where, following the application of debt recovery procedures:
- the customer could not be traced without incurring an unreasonable degree of expenditure; or
- the company has an insufficiently sound case to justify further expenditure on debt recovery procedures; or
- the likelihood of recovering the debt is so small in particular circumstances that further expenses on debt recovery cannot be justified.

The above write off rules apply primarily to customers to whom the company has ceased to provide a service. Only in exceptional circumstances is debt relating to continuing customers considered for write off.

d) Other accounting policies

All other accounting policies applied to the regulatory financial reporting accounts are set out in pages 122 to 129 of the consolidated Severn Trent Water Limited Annual Report and Accounts 2019, including the capitalisation policy which is outlined within the property, plant and equipment accounting policy note. Full details of the capitalisation policy are outlined in the Accounting Separation Methodology Statement.

e) Current cost accounting

Although there is no longer a requirement to produce full current cost financial statements, the requirement to disclose summary current cost financial results has been retained in the Wholesale current cost financial performance table.

The capital maintenance charge has been calculated using current cost depreciation values in the current cost fixed asset register which is indexed annually and adjusted for additions. Infrastructure renewals expenditure for below ground assets is included in operating costs.

Year ended 31 March 2019

[illegible]

2B - Totex analysis (wholesale)

Year ended 31 March 2019

Line description		Water Resources	Water Network+	Waste water Network+	Sludge	Total
		£m	£m	£m	£m	£m
A Operating expenditure						
2B.1	Power	9.003	48.501	45.283	-11.520	91.267
2B.2	Income treated as negative expenditure	-0.275	0.000	0.000	-20.451	-20.726
2B.3	Abstraction charges/discharge consents	11.388	0.391	11.034	0.000	22.813
2B.4	Bulk supply/Bulk discharge	8.201	3.248	0.020	0.007	11.476
2B.5	Other operating expenditure - renewals expensed in year (infrastructure)	2.067	102.549	32.715	0.000	137.331
2B.6	Other operating expenditure - renewals expensed in year (non-infrastructure)	0.004	0.066	1.598	0.000	1.668
2B.7	Other operating expenditure - excluding renewals*	19.362	144.718	122.868	50.349	337.297
2B.8	Local authority and cumulo rates	3.704	46.360	19.992	4.410	74.466
2B.9	Total operating expenditure (excluding third party services)	53.454	345.833	233.510	22.795	655.592
2B.10	Third party services	1.721	4.723	0.349	0.001	6.794
2B.11	Total operating expenditure	55.175	350.556	233.859	22.796	662.386
B Capital expenditure						
2B.12	Maintaining the long term capability of the assets - infrastructure	0.000	0.000	0.000	0.000	0.000
2B.13	Maintaining the long term capability of the assets - non-infrastructure	14.083	162.461	102.205	59.784	338.533
2B.14	Other capital expenditure - infrastructure	0.829	96.651	72.792	0.000	170.272
2B.15	Other capital expenditure - non-infrastructure	20.371	161.053	110.596	1.361	293.381
2B.16	Infrastructure network reinforcement	0.000	6.778	4.668	0.000	11.446
2B.17	Total gross capital expenditure excluding third party services**	35.283	426.943	290.261	61.145	813.632
2B.18	Third party services	0.000	0.000	0.000	0.000	0.000
2B.19	Total gross capital expenditure	35.283	426.943	290.261	61.145	813.632
C Grants and contributions						
2B.20	Grants and contributions	-0.113	-19.714	-22.280	0.000	-42.107
2B.21	Totex	90.345	757.785	501.840	83.941	1433.911
D Cash expenditure						
2B.22	Pension deficit recovery payments	2.426	10.746	9.842	3.186	26.200
2B.23	Other cash items	0.000	0.000	0.000	0.000	0.000
E Total						
2B.24	Totex including cash items	92.771	768.531	511.682	87.127	1460.111

* The Wholesale share of an exceptional pension cost relating to Guaranteed Minimum Pension (GMP) equalisation costs of £3.5 million and £3.5 million for water and waste water respectively is included in other operating expenditure. This is subsequently excluded in the Wholesale totex analysis (Table 4B).

** Capital expenditure includes the transfer of £31.1 million of water assets from Hafren Dyfrdwy to Severn Trent Water.

2C - Operating costs analysis (retail)

Year ended 31 March 2019

Line description	Household	Non-household	Total
	£m	£m	£m
Operating expenditure			
2C.1 Customer services	34.255	0.117	34.372
2C.2 Debt management	5.723	0.000	5.723
2C.3 Doubtful debts	24.277	0.000	24.277
2C.4 Meter reading	4.847	0.000	4.847
2C.5 Services to developers	0.000	2.687	2.687
2C.6 Other operating expenditure	22.780	0.314	23.094
2C.7 Total operating expenditure (excluding third party services)	91.882	3.118	95.000
2C.8 Third party services operating expenditure	0.000	0.000	0.000
2C.9 Total operating expenditure	91.882	3.118	95.000
2C.10 Depreciation - tangible fixed assets	2.603	0.000	2.603
2C.11 Amortisation - intangible fixed assets	4.865	0.000	4.865
2C.12 Total operating costs	99.350	3.118	102.468
2C.13 Debt written off	25.942	7.190	33.132

Differences between total operating costs and retail costs allowed in price limits

Household

Retail household total operating costs of £99.4 million are £11.8 million (10.6%) lower than the reallocated Final Determination (FD).

Customer services

Customer services costs of £34.3 million are £5.4 million (19%) adverse to the FD. The adverse variance is driven by an increase in the costs allocated to billing, payment handling & non-network enquiries for customer contact centre which was previously 100% allocated to debt management but post a review of what the team was doing it was discovered a volume of their activity related to other customer contacts.

Vulnerable customer incentives are £0.7 million (63.1%) adverse to FD as we continue to invest in ways to help customers who are struggling or unable to pay, over and above what was expected at PR14.

Debt management

Debt management costs of £5.7 million are £4.0 million (41.4%) favourable to the FD.

The favourable variance is partly driven by the decrease in costs allocated for the customer contact centre (now partly allocated to customers services as per the above commentary); and partly driven by 17/18 including a prior year movement for the cost of writing-off of court fees and additional recovery costs added to customers' bills.

Doubtful debts

Doubtful debt costs of £24.3 million are £7.4 million (23.4%) favourable to the FD. A bad debt performance of 2.0% reflects management's best estimate of debt risk at the end of the financial year, resulting in a reduced level of prudence in the bad debt provision year on year.

FD assumes 2.7% of revenue compared to actuals of 2.0% - the improvement is being driven by improved collection performance versus the expectation in the FD.

Meter reading

Meter reading costs of £4.8 million are £1.2 million (19.9%) favourable to the FD.

This favourable variance has been driven by efficiencies in the cost base realised by the meter reading team.

Other operating expenditure

Other operating expenditure of £22.8 million is £5.9 million (20.6%) favourable to the FD.

Partly driven by an increase in Customer Side Leaks costs which is driven by leakage recovery activity; and partly driven by an increase in G&S allocations.

General and support costs across all functions are £5.7 million (27.4%) favourable compared to the FD. Lower allocations to retail for General Finance support, Information Systems and Property driven by lower year on year headcount are the main drivers of the variance. PR14 allocates general and support expenditure between retail household and retail non-household based on customer numbers. The updated guidance in RAG 2.05 has been applied, which bases allocation on headcount equivalents as opposed to customer numbers for specific, general and support items

In 2018/19, the High Court issued a judgment in relation to a gender equality case in Guaranteed Minimum Pension rights that has an impact on the Group's defined benefit pension liabilities. Independent advice from the Group's actuaries has been obtained to determine the amount of the additional liability and a provision made in this year's financial statements. The retail share of this charge is £1.5 million. Whilst the table above includes the charge, we have adjusted the retail operating costs in the RoRE calculation so that the variance to FD excludes the impact of the charge.

Depreciation

Depreciation and amortisation charges of £7.5 million is £1.4 million (23.7%) adverse to the FD. There have been no changes in the depreciation policy. Variances in depreciation are driven by variances in cost.

Non-household

Retail non-household total operating costs of £3.1 million are £15.6 million (83%) lower than the Final Determination (FD). The disposal of our non-household retail activities to Water Plus in 2016, offset with a bad debt expense relating to legacy debt has contributed to this variance.

Specific activities which are classified as non-household retail under RAG 2.07 remain within Severn Trent Water. These activities are performed by Severn Trent Water wholesale teams and recharged to retail under the requirements of RAG 2.07. These are recorded in the Severn Trent Water non-household retail price control.

Developer services costs in relation to providing information and administration for new connections.

Investigatory visits/first visit to the customer where the cause of investigation is not a network issue.

Customer side leaks expenditure (excluding costs to meet wholesale outcomes).

2D - Historic cost analysis of fixed assets

Year ended 31 March 2019

Line description		Wholesale				Retail		Total
		Water Resources	Water Network+	Waste water Network+	Sludge	Household	Non-Household	
		£m	£m	£m	£m	£m	£m	
A	Cost							
2D.1	At 1 April 2018	372.540	5592.100	6672.480	789.800	42.300	0.000	13469.220
2D.2	Disposals	-5.593	-85.579	-54.743	-0.080	0.000	0.000	-145.995
2D.3	Additions	33.572	409.289	289.763	60.766	1.941	0.000	795.331
2D.4	Adjustments	34.942	-8.644	21.305	-46.151	-0.673	0.000	0.779
2D.5	Assets adopted at nil cost	0.000	0.000	42.116	0.000	0.000	0.000	42.116
2D.6	At 31 March 2019	435.461	5907.166	6970.921	804.335	43.568	0.000	14161.451
B	Depreciation							
2D.7	At 1 April 2018	-133.118	-2121.512	-2689.059	-386.406	-24.704	0.000	-5354.799
2D.8	Disposals	1.804	19.100	17.419	0.079	0.000	0.000	38.402
2D.9	Adjustments	-22.927	21.907	-8.383	8.587	1.063	0.000	0.247
2D.10	Charge for the year	-8.933	-117.714	-147.657	-23.751	-2.603	0.000	-300.658
2D.11	At 31 March 2019	-163.174	-2198.219	-2827.680	-401.491	-26.244	0.000	-5616.808
2D.12	Net book amount at 31 March 2019	272.287	3708.947	4143.241	402.844	17.324	0.000	8544.643
2D.13	Net book amount at 1 April 2018	239.422	3470.588	3983.421	403.394	17.596	0.000	8114.421
D	Depreciation charge for year							
2D.14	Principal services	-8.292	-116.393	-147.415	-23.750	-2.595	0.000	-298.445
2D.15	Third party services	-0.641	-1.321	-0.242	-0.001	-0.008	0.000	-2.213
2D.16	Total	-8.933	-117.714	-147.657	-23.751	-2.603	0.000	-300.658

2E - Analysis of capital contributions & land sales (wholesale)

Year ended 31 March 2019

Line description		Current year			Total
		Fully recognised in income statement	Capitalised and amortised (in income statement)	Fully netted off capex	
		£m	£m	£m	
A	Grants and contributions - water				
2E.1	Connection charges	0.000	11.184	0.000	11.184
2E.2	Infrastructure charge receipts	0.000	8.318	0.000	8.318
2E.3	Requisitioned mains	0.000	0.056	0.000	0.056
2E.4	Other contributions (price control)	0.000	0.000	0.000	0.000
2E.5	Diversions	7.401	0.000	0.000	7.401
2E.6	Other contributions (non-price control)	1.306	0.269	0.000	1.575
2E.7	Total	8.707	19.827	0.000	28.534
2E.8	Value of adopted assets		0.000		0.000
B	Grants and contributions - waste water				
2E.9	Infrastructure charge receipts	0.000	5.247	0.000	5.247
2E.10	Requisitioned sewers	0.000	1.542	0.000	1.542
2E.11	Other contributions (price control)	0.000	0.000	0.000	0.000
2E.12	Diversions	0.976	0.000	0.000	0.976
2E.13	Other contributions (non-price control)	0.902	15.491	0.000	16.393
2E.14	Total	1.878	22.280	0.000	24.158
2E.15	Value of adopted assets		42.116		42.116
			Current year		Total
			Water £m	Waste water £m	
C	Movements in capitalised grants and contributions				
2E.16	Brought forward		438.611	263.334	701.945
2E.17	Capitalised in year		19.827	22.280	42.107
2E.18	Amortisation (in income statement)		-6.013	-3.332	-9.345
2E.19	Carried forward		452.425	282.282	734.707
D	Land sales				
2E.20	Proceeds from disposals of protected land (€000)		3890.035	7425.120	11315.155

2F - Household revenues by customer type

Year ended 31 March 2019

Line description		Wholesale charges revenue	Retail revenue	Total revenue	Number of customers	Average household retail revenue per customer
		£m	£m	£m	000s	£
2F.1	Unmeasured water only customer	25.892	2.398	28.290	147.546	16.25
2F.2	Unmeasured waste water only customer	71.074	8.464	79.538	439.516	19.26
2F.3	Unmeasured water and waste water customer	552.784	54.208	606.992	1608.870	33.69
2F.4	Measured water only customer	22.911	3.197	26.108	155.821	20.52
2F.5	Measured waste water only customer	40.485	5.578	46.063	292.425	19.07
2F.6	Measured water and waste water customer	369.558	56.709	426.267	1362.241	41.63
2F.7	Total	1082.704	130.554	1213.258	4006.419	32.59

2G - Non-household water revenues by customer type

Year ended 31 March 2019

This table is no longer required following the disposal of our Non-Household Retail activities to Water Plus in 2016.

2H - Non-household waste water revenues by customer type

Year ended 31 March 2019

This table is no longer required following the disposal of our Non-Household Retail activities to Water Plus in 2016.

2I - Revenue analysis and wholesale control reconciliation

Year ended 31 March 2019

Line description		Household £m	Non-household £m	Total £m
A Wholesale charge - water				
2I.1	Unmeasured	307.723	2.192	309.915
2I.2	Measured	214.677	164.340	379.017
2I.3	Third party revenue	0.000	0.000	0.000
2I.4	Total	522.400	166.532	688.932
B Wholesale charge - waste water				
2I.5	Unmeasured	342.027	5.244	347.271
2I.6	Measured	218.277	207.139	425.416
2I.7	Third party revenue	0.000	0.000	0.000
2I.8	Total	560.304	212.383	772.687
2I.9 Wholesale Total		1082.704	378.915	1461.619
C Retail revenue				
2I.10	Unmeasured	65.070	0.000	65.070
2I.11	Measured	65.484	0.000	65.484
2I.12	Other third party revenue	0.154	2.531	2.685
2I.13 Retail total		130.708	2.531	133.239
D Third party revenue - non-price control				
2I.14	Bulk Supplies - water			7.388
2I.15	Bulk Supplies - waste water			0.024
2I.16	Other third party revenue			7.218
E Principal services - non-price control				
2I.17	Other appointed revenue			3.116
2I.18 Total appointed revenue				1612.604
		Water £m	Waste water £m	Total £m
2I.19	Wholesale revenue governed by price control	688.932	772.687	1461.619
2I.20	Grants and contributions	19.558	6.789	26.347
2I.21 Total revenue governed by wholesale price control		708.490	779.476	1487.966
2I.22	Amount assumed in wholesale determination	722.801	770.331	1493.132
2I.23	Adjustment for in-period ODI revenue	-2.310	18.501	16.191
2I.24	Adjustment for WRFIM	-7.227	-4.172	-11.399
2I.25 Total assumed revenue		713.264	784.660	1497.924
2I.26 Difference		-4.774	-5.184	-9.958

2I - Revenue analysis and wholesale control reconciliation

Year ended 31 March 2019

Difference between allowed and actual revenue under the wholesale control

Wholesale revenue for 2018/19 of £1,488.0 million is £10.0 million (0.7%) lower than the amount assumed in the Wholesale Price Control.

Wholesale Water

Wholesale Water revenue of £708.5 million is £4.8 million (0.7%) lower than the Wholesale Price Control. The main variances are as follows:

- Core tariff revenue is in line at £0.2 million (0.0%) lower than the Wholesale Price Control.
- Net Wholesale Water capital revenue is £4.6 million lower than the Wholesale Price Control. This is due to £2.0 million lower new connections revenue, £0.8 million lower s146 infrastructure charges and £1.8 million lower mains requisition income.

Wholesale Waste

Wholesale Waste revenue of £779.5 million is £5.2 million (0.7%) lower than the Wholesale Price Control. The main variances are as follows:

- Core tariff Waste revenue is £5.0 million (0.6%) lower than the Wholesale Price Control, mainly due to some prior period related adjustments.
- Net Wholesale Waste capital revenue is in line at £0.2 million lower than the Wholesale Price Control.

2J - Infrastructure network reinforcement costs

Line description		Network reinforcement capex £m	On site/site specific capex (memo only) £m
A	Wholesale water network+ (treated water distribution)		
2J.1	Distribution and trunk mains	6.731	19.542
2J.2	Pumping and storage facilities	0.047	0.000
2J.3	Other	0.000	0.000
2J.4	Total	6.778	19.542
B	Wholesale waste water network+ (sewage collection)		
2J.5	Foul and combined systems	4.258	5.569
2J.6	Surface water only systems	0.224	0.293
2J.7	Pumping and storage facilities	0.186	0.015
2J.8	Other	0.000	0.000
2J.9	Total	4.668	5.877

2K - Infrastructure charges reconciliation

Year ended 31 March 2019

Line description	Water £m	Waste water £m	Total £m
	£m	£m	£m

A	Impact of infrastructure charge discounts			
2K.1	Infrastructure charges	8.318	5.247	13.565
2K.2	Discounts applied to infrastructure charges	4.823	3.990	8.813
2K.3	Gross infrastructure charges	13.141	9.237	22.378

B	Comparison of revenue and costs			
2K.4	Variance brought forward	0.000	0.000	0.000
2K.5	Revenue	13.141	9.237	22.378
2K.6	Costs	-6.778	-4.668	-11.446
2K.7	Variance carried forward	6.363	4.569	10.932

The variance between cost and revenue for Water is £6.4 million. £1.9 million of this is due to volumes being higher than forecast and £0.8 million is due to forecast spend being lower than actual. The remainder is due to charges being set on five year spend and not in year expenditure.

The variance between cost and revenue for Waste water is £4.6 million. £1.3 million of this is due to volumes being higher than forecast and £0.8 million is due to forecast spend being lower than actual. The remainder is due to charges being set on five year spend and not in year expenditure.

Additional regulatory information

3A - Outcome Performance Table

Row	Unique ID	Performance commitment	Unit	Unit description
1	PR14SVEWSW_W-A1	W-A1: Number of complaints about drinking water quality	nr	No. of water quality complaints
2	PR14SVEWSW_W-A2	W-A2: Compliance with drinking water quality standards	%	Mean zonal compliance (%)
3	PR14SVEWSW_W-A3	W-A3: Asset stewardship - number of sites with coliform failures (WTWs)	nr	No. of sites with coliform failures per year
4	PR14SVEWSW_W-A4	W-A4: Number of successful catchment management schemes	nr	No. catchment management schemes
5	PR14SVEWSW_W-B1	W-B1: Resource efficiency (distribution input per customer) - amount of water taken out of the environment	nr	Litres per person per day (l/p/d)
6	PR14SVEWSW_W-B2	W-B2: Leakage levels	nr	Megalitres per day (ML/d)
7	PR14SVEWSW_W-B3	W-B3: Speed of response in repairing leaks (% fixed within 24 hours)	%	% visible leaks fixed within 24 hours
8	PR14SVEWSW_W-B4	W-B4: Number of minutes customers go without supply each year (interruptions to supply > 3 hours)	time	Minutes/property/year
9	PR14SVEWSW_W-B5	W-B5: % of customers with resilient supplies (those that benefit from a second source of supply)	%	% customers with 2nd supply source
10	PR14SVEWSW_W-B6	W-B6: Asset stewardship - mains bursts	nr	No. of burst mains per year
11	PR14SVEWSW_W-B7	W-B7: Customers at risk of low pressure	nr	No. customers at risk of low pressure
12	PR14SVEWSW_W-B8	W-B8: Restrictions on water use	nr	No. water restrictions in five-year period
13	PR14SVEWSW_W-B9	W-B9: Timing delays on Birmingham resilience scheme	text	Scheme delivery (3 components)
14	PR14SVEWSW_W-B10	W-B10: Non-delivery of the outcome of the Birmingham resilience scheme	text	Scheme delivery (3 components)
15	PR14SVEWSW_W-B11	W-B11: Timing delays on community risk schemes	text	Scheme delivery (3 components)
16	PR14SVEWSW_W-B12	W-B12: Non-delivery of the community risk schemes	text	Scheme delivery (3 components)
17	PR14SVEWSW_W-B13	W-B13: Timing delays on Elan Valley Aqueduct (EVA) maintenance	text	Scheme delivery
18	PR14SVEWSW_W-B14	W-B14: Non-delivery of the Elan Valley Aqueduct (EVA) maintenance	text	Scheme delivery
19	PR14SVEWSW_W-C1	W-C1: Customers rating our services as good value for money (based on tracker survey)	%	% customer satisfaction
20	PR14SVEWSW_W-D1	W-D1: Improvements in river water quality against WFD criteria	nr	No. WFD classification improvements
21	PR14SVEWSW_W-D2	W-D2: Asset stewardship - environmental compliance	%	% environmental compliance
22	PR14SVEWSW_W-D3	W-D3: Biodiversity	nr	No. of hectares improved
23	PR14SVEWSW_W-D4	W-D4: Sites with eel protection at intakes	nr	No. sites with eel protection at intakes
24	PR14SVEWSW_W-E1	W-E1: Size of our carbon footprint	nr	ktCO2e
25	PR14SVEWSW_W-F1	W-F1: Improved understanding of our services through education	nr	No. of people - education programme
26	PR14SVEWSWW_S-A1	S-A1: Number of internal sewer flooding incidents	nr	No. of internal sewer flooding incidents
27	PR14SVEWSWW_S-A2	S-A2: Number of external sewer flooding incidents	nr	No. of external sewer flooding incidents
28	PR14SVEWSWW_S-A3	S-A3: Partnership working	nr	No. of partnership working projects
29	PR14SVEWSWW_S-A4	S-A4: Asset stewardship - blockages	nr	No. of sewer blockages per year
30	PR14SVEWSWW_S-A5	S-A5: Statutory obligations (Section 101A schemes)	nr	No. of connectable properties, identified as polluting or likely to pollute, associated with new Section 101A schemes
31	PR14SVEWSWW_S-B1	S-B1: Customers rating our services as good value for money (based on tracker survey)	%	% customer satisfaction
32	PR14SVEWSWW_S-C1	S-C1: Improvements in river water quality against WFD criteria	nr	No. of WFD classification improvements
33	PR14SVEWSWW_S-C2	S-C2: The number of category 3 pollution incidents	nr	No. of pollution incidents (cat 3)
34	PR14SVEWSWW_S-C3	S-C3: Asset stewardship - environmental compliance (basket of measures)	%	% compliance with WwTW regulations
35	PR14SVEWSWW_S-C4	S-C4: Biodiversity	nr	No. of hectares improved
36	PR14SVEWSWW_S-C5	S-C5: Sustainable sewage treatment	nr	No. of WwTWs avoiding investment
37	PR14SVEWSWW_S-C6	S-C6: Serious pollution incidents	nr	No. of pollution incidents (cats 1 and 2)
38	PR14SVEWSWW_S-C7	S-C7: Overall environmental performance (basket of environmental measures)	nr	No. of environmental targets met
39	PR14SVEWSWW_S-C8	S-C8: The number of category 4 pollution incidents	nr	No. of pollution incidents (cat 4)
40	PR14SVEWSWW_S-D1	S-D1: Size of our carbon footprint	nr	ktCO2e

Decimal places	2018-19 performance level - actual	2018-19 PCL met?	2018-19 outperformance payment or underperformance payment - in-period ODIs (indicator)	2018-19 outperformance payment or underperformance payment - in-period ODIs (£m, to 4 dp)	2018-19 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (indicator)	2018-19 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (£m, to 4 dp)
0	11856	No	Underperformance payment	-1.7070		
3	99.940	No	Underperformance payment	-1.7070		
0	13	No			Underperformance payment	-3.7040
0	26	Yes	Outperformance payment	9.2700		
0	225	No				
1	419.5	Yes	Underperformance payment	-2.2546		
0	32%	No	Underperformance payment	-1.3265		
2	19.06	No	Underperformance payment	-7.7199		
1	78.1	-				
0	6453	Yes		-		
0	158	Yes	Underperformance payment	-0.0198		
0	0	Yes		-		
na	On track	Yes		-		
na	On track	Yes		-		
na	On track	Yes		-		
na	On track	Yes		-		
na	Delivered	-		-		
na	Delivered	-		-		
0	63	Yes	Outperformance payment	0.1243		
0	0	-		-		
2	97.69	No				
0	343	-				
0	On track	Yes				
0	219	Yes		-		
0	185371	Yes				
0	725	No	Underperformance payment	-1.0056		
0	3766	Yes	Outperformance payment	3.7569		
0	5	-		-		
0	46898	Yes		-		
0	19	-				
0	63	Yes	Outperformance payment	0.1245		
0	53	-		-		
0	328	Yes	Outperformance payment	0.4683		
2	97.69	No	Underperformance payment deadband			
0	343	-		-		
0	0	-		-		
0	7	No				
0	4	Yes	Outperformance payment	2.3894		
0	217	No				
0	204	Yes	Outperformance payment	0.0439		

3A - Outcome Performance Table (cont.)

Row	Unique ID	Performance commitment	Unit	Unit description
41	PR14SVEWSWW_S-E1	S-E1: Improved understanding of our services through education	nr	No. of people - education programme
42	PR14SVEHHR_R-A1	R-A1: Customer satisfaction with their service (based on a survey)	text	Customer satisfaction ranking
43	PR14SVEHHR_R-A2	R-A2: Customers' experience of dealing with us (based on Ofwat's SIM)	text	Service incentive mechanism (SIM) score ranking
44	PR14SVEHHR_R-B1	R-B1: Customers helped by a review of their tariff & water usage &/or supported by SVT social fund	nr	No. of customers engaged with on debt
45	PR14SVEHHR_R-B2	R-B2: Percentage of customers who do not pay (household bad debt divided by total household revenue)	%	% of customers who do not pay
46	PR14SVEWSW_A1	A1: Discoloured water contacts	nr	No. per 1,000 population
47	PR14SVEWSW_A2	A2: Mean zonal compliance (MZC)	%	Mean zonal compliance (%)
48	PR14SVEWSW_B1	B1: Average duration of interruptions - 3 hours or longer (planned and unplanned interruptions)	time	Hours/property/year
49	PR14SVEWSW_B2	B2: Sustainable economic level of leakage	nr	Litres per property per day (l/prop/day)
50	PR14SVEWSW_B3	B3: Security of supply index (SOSI)	score	Security of Supply Index (SOSI)
51	PR14SVEWSW_B4	B4: Number of bursts	nr	No. of burst mains per year
52	PR14SVEWSW_C1	C1: Gross operational greenhouse gas emissions	nr	tCO2e
53	PR14SVEWSW_D1	D1: Customers' perception based on market research	%	% customer satisfaction
54	PR14SVENHHR_F1	F1: Non-household Service incentive mechanism (SIM)	score	Service incentive mechanism (SIM) score
55	PR14SVEHHR_E1	E1: Per capita consumption and water efficiency	nr	Litres per capita per day
56	PR14SVEHHR_E2	E2: Service incentive mechanism (SIM)	score	Service incentive mechanism (SIM) score

Decimal places	2018-19 performance level - actual	2018-19 PCL met?	2018-19 outperformance payment or underperformance payment - in-period ODIs (indicator)	2018-19 outperformance payment or underperformance payment - in-period ODIs (£m, to 4 dp)	2018-19 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (indicator)	2018-19 outperformance payment or underperformance payment - ODIs payable at the end of AMP6 (£m, to 4 dp)
0	185371	Yes				
na	Upper Quartile	Yes				
na	81.45					
0	52547	Yes				
2	2.00	Yes				
2	0.45	Yes			Outperformance payment	0.0019
2	99.94	No			Underperformance payment	-0.0189
2	0.03	Yes			Outperformance payment	0.0074
1	97.8	No			Underperformance payment	-0.0262
0	100	Yes				
0	68	No			Underperformance payment deadband	
0	951	Yes				
na	67%	No				
1	83.9	Yes				
2	132.76	No				
1	78.4	No				

3B - Sub-measures performance table

Row	Unique ID	PC/sub-measure ID	PC/sub-measure	2018-19 performance level - actual	2018-19 PCL met?
1	PR14SVTWSWW_S-C3	00	S-C3: Asset stewardship - environmental compliance (basket of measures)	97.69	No
2	PR14SVTWSWW_S-C3	01	% of sewage treatment works passing their numeric consents	98.57	No
3	PR14SVTWSWW_S-C3	02	% of actions raised from EA regulatory site audits (actions raised as a % of total site visits)	96.84	No
4	PR14SVTWSWW_S-C3	03	% of sites that do not exceed their 90%ile flow on sewage treatment works or maximum daily flow on water treatment works	95.41	No
5	PR14SVTWSWW_S-C3	04	% of sites compliant with their abstraction permits	99.96	No
6	PR14SVTWSWW_S-C7	00	S-C7: Overall environmental performance (basket of environmental measures)	4	Yes
7	PR14SVTWSWW_S-C7	01	Improvements in river water quality against WFD criteria	Passed	Yes
8	PR14SVTWSWW_S-C7	02	Asset stewardship - environmental compliance	Passed	Yes
9	PR14SVTWSWW_S-C7	03	Total number of category 1, 2, and 3 pollution incidents	Passed	Yes
10	PR14SVTWSWW_S-C7	04	Biodiversity improvements	Passed	Yes

3C - AIM Table

Nil return.

We do not have any active AIM sites, therefore this table is deliberately blank.

3D - SIM Table

Line description		Score
		Number

A	Qualitative performance	
3D.1	1st survey score	4.25
3D.2	2nd survey score	4.23
3D.3	3rd survey score	4.24
3D.4	4th survey score	4.24
3D.5	Qualitative SIM score (out of 75)	60.75
3D.6	Total contact score	86.05
3D.7	Quantitative SIM score (out of 25)	20.70
3D.8	Total annual SIM score (out of 100)	81.45

4A - Non-financial information

Year ended 31 March 2019

Line description		Units	DPs	Current year	
				Unmeasured	Measured
Retail					
A	Household				
4A.1	Number of void households	000s	3	164.566	87.316
4A.2	Per capita consumption (excluding supply pipe leakage) l/h/d	l/h/d	2	141.69	116.56
				Water	Waste water
Wholesale					
B	Volume (ML/d)				
4A.3	Bulk supply export	ML/d	3	6.089	0.068
4A.4	Bulk supply import	ML/d	3	49.534	0.078
4A.5	Distribution input	ML/d	3	1966.424	

4B - Wholesale totex analysis

Year ended 31 March 2019

Line description		Current year		Cumulative 2015-20	
		Water £m	Waste water £m	Water £m	Waste water £m
A	Actual totex				
4B.1	Actual totex	861.302	598.809	2703.745	2109.829
B	Items excluded from the menu				
4B.2	Third party costs	-6.444	-0.350	-22.307	-1.789
4B.3	Pension deficit recovery payments	-13.172	-13.028	-48.057	-45.826
4B.4	Other 'Rule book' adjustments	-33.855	-3.501	-24.984	5.610
4B.5	Total items excluded from the menu	-53.471	-16.879	-95.348	-42.005
C	Transition expenditure				
4B.6	Transition expenditure	0.000	0.000	11.443	0.000
D	Adjusted actual totex				
4B.7	Adjusted actual totex	807.831	581.930	2619.840	2067.824
4B.8	Adjusted actual totex base year prices	697.672	502.575	2359.695	1865.583
E	Allowed totex				
4B.9	Allowed totex based on final menu choice - base year prices	584.959	574.688	2241.921	2197.338

4B - Wholesale totex analysis

Year ended 31 March 2019

In the past year, we have completed the variation to our region by moving Welsh areas previously part of Severn Trent Water into Hafren Dyfrdwy and moved the English region of Dee Valley Water into Severn Trent Water. Our PR14 final determination (FD) allowances have been adjusted to reflect this change and are set out in the variation to our appointment ('revised FD').

Table 4B compares our total wholesale expenditure ('totex') in the current year and AMP to date to the allowed totex in the revised FD.

A number of items are excluded from the totex menu and appear as reconciling items in table 4B. As in the prior year reconciling items include third party costs and pension deficit recovery payments. In addition, 'Other rule book' adjustments have been made as outlined below.

- The company recorded exceptional pension costs of £8.5 million arising from the High Court judgment in the Lloyds bank case relating to Guaranteed Minimum Pension rights. The wholesale allocation of this, £7.0 million, is removed from actual totex to compare to the allowed totex.
- On 1 July, following the boundary alignment, £31.1 million of water assets were transferred to Severn Trent Water from Hafren Dyfrdwy. The value of this transfer is included within the actual totex figure and is therefore removed to compare to allowed totex.
- Third party costs are not included in menu totex and, as noted above, are included as a standard reconciling item between actual and allowed totex. Following the boundary alignment on 1 July, this includes bulk supplies between Severn Trent Water and Hafren Dyfrdwy. The revised FD was not adjusted for bulk supplies and so these costs should still be included in totex to be comparable. This has led to an adjustment of £1.2 million.

Comparison to allowed totex

After making the adjustments outlined above we are able to compare our costs to the revised FD for the new Severn Trent England region.

As a responsible business, we need to make sure our assets continue to provide service now and into the future. At the same time, we're incentivised to become more efficient - any amount we save is shared with customers through lower bills (spending more is also shared with customers).

The FD reflects the amount Ofwat calculated that we would need to spend between 2015 and 2020. The FD included totex assumptions for the wholesale water and waste water services. Unlike previous price reviews, the FD did not include a breakdown by output or investment area. Therefore to understand variances between actual expenditure and our FD we have used a two-stage process:

- First, we have compared our actual expenditure with our 2015-20 plan to better understand programme variances and categorise them as either timing (accelerated or delayed investment), scope changes (doing something different to what we planned), or efficiency (finding better ways of delivering the outcomes our customers want or finding more efficient ways of delivering the same outcome);
- Then, we have calculated a service level adjustment to reconcile actual expenditure to the FD.

Other 'Rule book' adjustments

Description	Water £m	Waste water £m	Total £m
Exceptional pension costs	3.521	3.482	7.003
Fixed asset transfers from Hafren Dyfrdwy	31.142	-	31.142
Bulk supply costs from HD to remove	0.406	0.027	0.433
Third party costs for bulk supply to HD - move back to base totex	(1.214)	(0.008)	(1.222)
Total adjustment	33.855	3.501	37.356

Differences between actual and allowed totex

Totex in £m at 12/13 prices	Service	Cumulative to 17/18	Cumulative to 18/19
Adjusted Actual totex (menu)	Water	1,662.0	2,359.7
	Waste water	1,363.0	1,865.6
FD menu assumptions	Water	1,657.0	2,241.9
	Waste water	1,622.7	2,197.3
	Water	5.0	117.8
Total variance	Waste water	(259.7)	(331.7)
	Total	(254.7)	(213.9)

Total cumulative expenditure, restated to 2012/13 prices is lower than allowed in the FD by £214 million. As can be seen above, this is a reduction on the prior year cumulative. This is due to our reinvestment of some of our outperformance and a reversal of timing differences.

Our waste water service continues to perform well and deliver efficiencies against plan. We have spent more on water service than originally planned. For both services the position is more complex than the headline figures suggest, as explained below.

Water service

An increase in costs above the FD on a cumulative basis of £113 million (from £5 million to £118 million cumulative) in the year. This is in part due to £18 million of unwinding of the timing difference from £48 million to £30 million, and additional costs due to the hot weather last summer. The remaining increase is the net reinvestment in our assets to deliver service improvements which is part of the £100 million outlined in the prior year.

Waste water service

Continuing the outperformance from prior years, our waste water service cumulative outperformance has increased by £72 million from £260 million to £332 million. This is in part an additional year of the efficiency built into our PR14 plan, being the cumulative difference between our plan and the FD (c. £26 million per annum), net of £10 million of timing differences from prior years unwinding in 2018/19 on Water Framework Directive schemes, and also additional contracted efficiencies being realised.

19/20 outlook

We plan to deliver all expected outcomes during AMP6 and therefore expect the timing adjustment to fully unwind next year. We expect the pattern seen to date to continue for the following year; as such, AMP6 will have seen the delivering of efficiencies in our waste water services, partly offset by additional investment in our Water service.

4C - Forecast impact of performance on RCV

Year ended 31 March 2019

Line description	Water	Waste water
	£m	£m
4C.1 Cumulative totex over/underspend so far in the price control period	137.439	-386.621
4C.2 Customer share of cumulative totex over/underspend	-80.336	205.041
4C.3 RCV element of cumulative totex over/underspend	55.261	-190.401
4C.4 Adjustment for ODI rewards adjusted for ODI out/under performance payment	0.000	0.000
4C.5 RCV determined at FD at 31 March	4432.855	4759.756
4C.6 Projected 'shadow' RCV	4488.116	4569.355

4D -Wholesale totex analysis (water)

Year ended 31 March 2019

Line description	Water resources			Network+			Total
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
	£m	£m	£m	£m	£m	£m	
A Operating expenditure							
4D.1 Power	0.000	9.003	11.737	0.000	4.636	32.128	57.504
4D.2 Income treated as negative expenditure	0.000	-0.275	0.000	0.000	0.000	0.000	-0.275
4D.3 Abstraction charges/discharge consents	11.388	0.000	0.000	0.000	0.391	0.000	11.779
4D.4 Bulk supply	0.000	8.201	0.000	0.000	3.248	0.000	11.449
4D.5 Other operating expenditure - renewals expensed in year (infrastructure)	0.000	2.067	0.890	0.000	0.000	101.659	104.616
4D.6 Other operating expenditure - renewals expensed in year (non-infrastructure)	0.000	0.004	0.000	0.000	0.010	0.056	0.070
4D.7 Other operating expenditure - excluding renewals	0.050	19.312	5.140	0.000	43.585	95.993	164.080
4D.8 Local authority and cumulo rates	0.000	3.704	2.438	0.234	6.194	37.494	50.064
4D.9 Total operating expenditure (excluding third party services)	11.438	42.016	20.205	0.234	58.064	267.330	399.287
4D.10 Third party services	0.011	1.710	0.182	0.000	1.727	2.814	6.444
4D.11 Total operating expenditure	11.449	43.726	20.387	0.234	59.791	270.144	405.731
B Capital expenditure							
4D.12 Maintaining the long term capability of the assets - infrastructure	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.13 Maintaining the long term capability of the assets - non-infrastructure	0.000	14.083	0.000	0.010	78.957	83.494	176.544
4D.14 Other capital expenditure - infrastructure	0.000	0.829	16.919	0.000	4.472	75.260	97.480
4D.15 Other capital expenditure - non-infrastructure	0.818	19.553	5.249	0.003	98.795	57.006	181.424
4D.16 Infrastructure network reinforcement	0.000	0.000	0.000	0.000	0.000	6.778	6.778
4D.17 Total gross capital expenditure (excluding third party services)	0.818	34.465	22.168	0.013	182.224	222.538	462.226
4D.18 Third party services	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.19 Total gross capital expenditure	0.818	34.465	22.168	0.013	182.224	222.538	462.226
C Grants and contributions							
4D.20 Grants and contributions	0.000	-0.113	0.000	0.000	-0.155	-19.559	-19.827
4D.21 Totex	12.267	78.078	42.555	0.247	241.860	473.123	848.130
D Cash expenditure							
4D.22 Pension deficit recovery payments	0.000	2.426	0.404	0.000	4.519	5.823	13.172
4D.23 Other cash items	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.24 Totex including cash items	12.267	80.504	42.959	0.247	246.379	478.946	861.302
E Unit cost information (operating expenditure)	Units						
4D.25 Licenced volume available	ML	987605.000					
4D.25 Volume abstracted	ML	724287.630					
4D.25 Volume transported	ML		848607.900				
4D.25 Average volume stored	ML			111447.000			
4D.25 Distribution input volume	ML				701886.970		
4D.25 Distribution input volume	ML					717744.797	
4D.26 Unit cost	£/ML	11.593	60.371	24.024	2.100	85.186	376.379
4D.27 Population	000s	8545.128	8545.128	8545.128	8545.128	8545.128	8545.128
4D.28 Unit cost	£/pop	1.340	5.117	2.386	0.027	6.997	31.614

Other operating expenditure includes an exceptional pension cost of £3.5 million.

Capital expenditure includes the transfer of £31.1 million of water assets from Hafren Dyfrdwy to Severn Trent Water.

4E - Wholesale totex analysis (waste water)

Year ended 31 March 2019

Line description	Network+ Sewage collection			Network + Sewage treatment		Sludge			Total
	Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Imported sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
	£m	£m	£m	£m	£m	£m	£m	£m	
A Operating expenditure									
4E.1 Power	5.759	1.659	1.101	35.389	1.375	0.035	-11.558	0.003	33.763
4E.2 Income treated as negative expenditure	0.000	0.000	0.000	0.000	0.000	0.000	-18.196	-2.255	-20.451
4E.3 Discharge consents	3.760	1.083	0.719	5.267	0.205	0.000	0.000	0.000	11.034
4E.4 Bulk discharge	0.006	0.002	0.001	0.011	0.000	0.002	0.002	0.003	0.027
4E.5 Other operating expenditure - renewals expensed in year (infrastructure)	23.813	4.441	4.461	0.000	0.000	0.000	0.000	0.000	32.715
4E.6 Other operating expenditure - renewals expensed in year (non-infrastructure)	1.062	0.306	0.203	0.026	0.001	0.000	0.000	0.000	1.598
4E.7 Other operating expenditure - excluding renewals	27.117	7.813	5.184	79.659	3.095	11.810	25.157	13.382	173.217
4E.8 Local authority rates and cumulo rates	0.136	0.039	0.026	19.051	0.740	0.042	4.361	0.007	24.402
4E.9 Total operating expenditure (excluding third party services)	61.653	15.343	11.695	139.403	5.416	11.889	-0.234	11.140	256.305
4E.10 Third party services	0.233	0.067	0.045	0.004	0.000	0.000	0.001	0.000	0.350
4E.11 Total operating expenditure	61.886	15.410	11.740	139.407	5.416	11.889	-0.233	11.140	256.655
B Capital expenditure									
4E.12 Maintaining the long term capability of the assets - infra	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4E.13 Maintaining the long term capability of the assets - non-infra	13.413	2.179	1.713	84.202	0.698	3.447	53.547	2.790	161.989
4E.14 Other capital expenditure - infra	27.014	22.184	22.184	1.410	0.000	0.000	0.000	0.000	72.792
4E.15 Other capital expenditure - non-infra	5.266	2.293	2.293	100.744	0.000	0.053	1.308	0.000	111.957
4E.16 Infrastructure network reinforcement	3.734	0.467	0.467	0.000	0.000	0.000	0.000	0.000	4.668
4E.17 Total gross capital expenditure (excluding third party services)	49.427	27.123	26.657	186.356	0.698	3.500	54.855	2.790	351.406
4E.18 Third party services	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4E.19 Total gross capital expenditure	49.427	27.123	26.657	186.356	0.698	3.500	54.855	2.790	351.406
C Grants and contributions									
4E.20 Grants and contributions	-7.886	-1.080	-1.080	-12.234	0.000	0.000	0.000	0.000	-22.280
4E.21 Totex	103.427	41.453	37.317	313.529	6.114	15.389	54.622	13.930	585.781
D Cash expenditure									
4E.22 Pension deficit recovery payments	1.456	0.419	0.278	7.689	0.000	1.399	1.657	0.130	13.028
4E.23 Other cash items	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4E.24 Totex including cash items	104.883	41.872	37.595	321.218	6.114	16.788	56.279	14.060	598.809
E Unit cost information (operating expenditure)	Units								
4E.25 Volume collected	MI	769046.548							
4E.25 Volume collected	MI		315152.929						
4E.25 Volume collected	MI			278394.784					
4E.25 Biochemical Oxygen Demand (BOD)	Tonnes			228879.484					
4E.25 Biochemical Oxygen Demand (BOD)	Tonnes				8898.178				
4E.25 Volume transported	m3					1498102.536			
4E.25 Dried solid mass treated	ttds						238.889		
4E.25 Dried solid mass disposed	ttds							134.556	
4E.26 Unit cost	£/unit	80.471	48.897	42.170	609.085	608.664	7.936	-975.348	82790.808
4E.27 Population	000s	9113.072	9113.072	9113.072	9113.072	9113.072	9113.072	9113.072	9113.072
4E.28 Unit cost	£/pop	6.791	1.691	1.288	15.297	0.594	1.305	-0.026	1.222

Other operating expenditure includes an exceptional pension cost of £3.5 million.

4F - Operating cost analysis (household retail)

Year ended 31 March 2019

Line description		Household unmeasured				Household measured				Total
		Water only	Waste water only	Water and waste water	Total	Water only	Waste water only	Water and waste water	Total	
		£m	£m	£m	£m	£m	£m	£m	£m	
A	Operating expenditure									
4F.1	Customer services	1.073	3.196	11.698	15.967	1.574	2.954	13.760	18.288	34.255
4F.2	Debt management	0.244	0.727	2.662	3.633	0.180	0.338	1.572	2.090	5.723
4F.3	Doubtful debts	0.350	1.586	12.364	14.300	0.283	0.919	8.775	9.977	24.277
4F.4	Meter reading					0.417	0.783	3.647	4.847	4.847
4F.5	Other operating expenditure	0.841	2.505	9.171	12.517	0.883	1.658	7.722	10.263	22.780
4F.6	Total operating expenditure (excluding third party services)	2.508	8.014	35.895	46.417	3.337	6.652	35.476	45.465	91.882
4F.7	Third party services operating expenditure	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4F.8	Total operating expenditure	2.508	8.014	35.895	46.417	3.337	6.652	35.476	45.465	91.882
4F.9	Depreciation - tangible fixed assets (on assets existing at 31 March 2015)	0.055	0.165	0.604	0.824	0.061	0.115	0.537	0.713	1.537
4F.10	Depreciation - tangible fixed assets (on assets acquired since 1 April 2015)	0.039	0.117	0.428	0.584	0.041	0.078	0.363	0.482	1.066
4F.11	Amortisation - intangible fixed assets (on assets existing at 31 March 2015)	0.027	0.080	0.292	0.399	0.028	0.053	0.247	0.328	0.727
4F.12	Amortisation - intangible fixed assets (on assets acquired since 1 April 2015)	0.152	0.454	1.662	2.268	0.161	0.302	1.407	1.870	4.138
4F.13	Total operating costs	2.781	8.830	38.881	50.492	3.628	7.200	38.030	48.858	99.350
4F.14	Capital expenditure	0.269	0.801	2.934	4.004	0.371	0.697	3.245	4.313	8.317
B	Demand-side efficiency and customer-side leaks analysis - Household									
4F.15	Demand-side water efficiency - gross expenditure									1.596
4F.16	Demand-side water efficiency - expenditure funded by wholesale									-0.144
4F.17	Demand-side water efficiency - net retail expenditure									1.452
4F.18	Customer-side leak repairs - gross expenditure									4.116
4F.19	Customer-side leak repairs - expenditure funded by wholesale									0.000
4F.20	Customer-side leak repairs - net retail expenditure									4.116

4G - Wholesale current cost financial performance

Year ended 31 March 2019

Line description		Water	Waste water	Total
		£m	£m	£m
4G.1	Revenue	703.456	775.454	1478.910
4G.2	Operating expenditure	-405.731	-256.655	-662.386
4G.3	Capital maintenance charges	-136.558	-202.978	-339.536
4G.4	Other operating income	3.240	7.405	10.645
4G.5	Current cost operating profit	164.407	323.226	487.633
4G.6	Other income	6.196	10.154	16.350
4G.7	Interest income	0.122	0.131	0.253
4G.8	Interest expense	-101.531	-109.027	-210.558
4G.9	Other interest expense	-6.045	-6.491	-12.536
4G.10	Current cost profit before tax and fair value movements	63.149	217.993	281.142
4G.11	Fair value gains/(losses) on financial instruments	18.166	19.507	37.673
4G.12	Current cost profit before tax	81.315	237.500	318.815

4H - Financial metrics

As at 31 March 2019

Line description		Units	Current year	AMP to date
A Financial indicators				
4H.1	Net debt	£m	5857.084	
4H.2	Regulated equity	£m	3335.527	
4H.3	Regulated gearing	%	63.72%	
4H.4	Post tax return on regulated equity	%	8.84%	
4H.5	RORE (return on regulated equity)	%	8.23%	9.04%
4H.6	Dividend yield	%	6.51%	
4H.7	Retail profit margin - Household	%	2.58%	
4H.8	Retail profit margin - Non household	%	-0.15%	
4H.9	Credit rating	Text	BBB+ (stable outlook)	
4H.10	Return on RCV	%	5.70%	
4H.11	Dividend cover	dec	1.40	
4H.12	Funds from operations (FFO)	£m	666.549	
4H.13	Interest cover (cash)	dec	5.23	
4H.14	Adjusted interest cover (cash)	dec	3.32	
4H.15	FFO/Debt	dec	0.11	
4H.16	Effective tax rate	%	12.06%	
4H.17	RCF	£m	449.539	
4H.18	RCF/capex	dec	0.57	
B Revenue and earnings				
4H.19	Revenue (actual)	£m	1594.858	
4H.20	EBITDA (actual)	£m	837.472	
C Movement in RoRE				
4H.21	Base return	%	5.60%	5.63%
4H.22	Totex out/(under) performance	%	-0.10%	0.66%
4H.23	Retail cost out/(under) performance	%	0.25%	0.44%
4H.24	ODI out/(under) performance	%	-0.11%	1.00%
4H.25	Financing out/(under) performance	%	2.59%	1.31%
4H.26	Other factors	%	0.00%	0.00%
4H.27	Regulatory return for the year	%	8.23%	9.04%
D Borrowings				
4H.28	Proportion of borrowings which are fixed rate	%	59.93%	
4H.29	Proportion of borrowings which are floating rate	%	16.80%	
4H.30	Proportion of borrowings which are index linked	%	23.27%	
4H.31	Proportion of borrowings due within 1 year or less	%	5.80%	
4H.32	Proportion of borrowings due in more than 1 year but no more than 2 years	%	4.23%	
4H.33	Proportion of borrowings due in more than 2 years but no more than 5 years	%	22.63%	
4H.34	Proportion of borrowings due in more than 5 years but no more than 20 years	%	44.22%	
4H.35	Proportion of borrowings due in more than 20 years	%	23.13%	

Return on Regulated Equity (RoRE)

We continue to have a sector leading RoRE of 9.0%, reflecting cumulative outperformance against the FD on all components of RoRE. This is most evident in relation to our waste service (ODI) performance, whereby through exceptional delivery for customers we have hit the ODI cap. As part of our agreement with Ofwat, the cap has been extended with the benefits to customers locked in through even more stretching targets. Below we discuss the key components of RoRE.

Base return

The FD base return of 5.7% has been adjusted by 0.1% to exclude the element of the non-household retail return that is now earned by Water Plus, our retail non-household joint venture with United Utilities. A minor adjustment of 0.02% has also been made for the apportionment of the base return resulting from the border variation.

Totex performance

Our totex performance reflects £2.9 million of additional spend relative to the FD (after sharing with customers). As explained in table 4B, this reflects reinvestment of some of our outperformance and the reversal of timing differences relating to reported capital expenditure compared to the profile of spend in the FD.

Retail cost performance

We have been able to deliver further retail cost reductions and thereby outperform the FD on retail costs as explained further in the narrative to table 2C. After adjusting for tax, £7.3 million of outperformance in 2012/13 prices has been recognised in RoRE.

ODI performance

In this year we reached the ODI cap. As part of our agreement with Ofwat to extend the cap, we accepted more stretching targets for waste measures. Despite the additional stretch we have still earned a reward of £5.0 million on our waste water ODIs, reflecting exceptional delivery for customers. Our overall performance on water ODIs has resulted in a total ODI penalty of £3.1 million.

Financing performance

The continued benefits of low interest rates and high inflation has resulted in our real cost of debt being 1.9% lower than the FD cost of debt. We also continue to have a lower debt requirement than assumed in the FD.

In addition, our low cost of debt also reflects the benefits of continued low interest rates and from our strategy of replacing expensive fixed rate debt with new low cost debt.

RCV run off

We note that the guidance no longer requires the RCV run off to be reported as a component of RoRE. We have therefore excluded the impact of the RCV run off from the RoRE, which results in marginally improving our RoRE by 0.1% over the AMP.

4I - Financial derivatives

Year ended 31 March 2019

Line description		Nominal value by maturity (net)			Total value at 31 March 2019		Total accretion at 31 March 2019	Interest rate (weighted average for 12 months to 31 March 2019)	
		1 to 2 years	2 to 5 years	Over 5 years	Nominal value (net)	Mark to Market		Payable	Receivable
		£m	£m	£m	£m	£m		£m	%
Derivative type									
A	Interest rate swap (sterling)								
4I.1	Floating to fixed rate	0.000	100.000	674.708	774.708	-112.728	0.000	5.14%	1.00%
4I.2	Floating from fixed rate	0.000	0.000	625.000	625.000	26.147	0.000	2.31%	2.97%
4I.3	Floating to index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.4	Floating from index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.5	Fixed to index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.6	Fixed from index-linked	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.7	Total	0.000	100.000	1299.708	1399.708	-86.581	0.000		
B	Foreign Exchange								
4I.8	Cross currency swap USD	0.000	0.000	121.531	121.531	18.269	0.000	0.00%	0.00%
4I.9	Cross currency swap EUR	0.000	0.000	11.440	11.440	10.051	0.000	0.00%	0.00%
4I.10	Cross currency swap YEN	0.000	0.000	8.529	8.529	8.760	0.000	0.00%	0.00%
4I.11	Cross currency swap Other	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.12	Total	0.000	0.000	141.500	141.500	37.080	0.000		
C	Currency interest rate								
4I.13	Currency interest rate swaps USD	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.14	Currency interest rate swaps EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.15	Currency interest rate swaps YEN	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.16	Currency interest rate swaps Other	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.17	Total	0.000	0.000	0.000	0.000	0.000	0.000		
D	Forward currency contracts								
4I.18	Forward currency contracts USD	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.19	Forward currency contracts EUR	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.20	Forward currency contracts YEN	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.21	Forward currency contracts CAD	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.22	Forward currency contracts AUD	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.23	Forward currency contracts HKD	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.24	Forward currency contracts Other	0.000	0.000	0.000	0.000	0.000	0.000	0.00%	0.00%
4I.25	Total	0.000	0.000	0.000	0.000	0.000	0.000		
E	Other financial derivatives								
4I.26	Other financial derivatives	0.000	0.000	250.000	250.000	-1.255	0.000	0.00%	0.00%
F	Total								
4I.27	Total financial derivatives	0.000	100.000	1691.208	1791.208	-50.756	0.000		

Other financial derivatives include inflation swaps of -£6.2 million and energy swaps of £4.9 million.

4J - Atypical expenditure by business unit - Wholesale water

Year ended 31 March 2019

Line description	Water resources			Network+			Total
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
	£m	£m	£m	£m	£m	£m	
A Operating expenditure (excl. atypicals)							
4J.1 Power	0.000	9.003	11.737	0.000	4.636	32.128	57.504
4J.2 Income treated as negative expenditure	0.000	-0.275	0.000	0.000	0.000	0.000	-0.275
4J.3 Abstraction charges/ discharge consents	11.388	0.000	0.000	0.000	0.391	0.000	11.779
4J.4 Bulk supply	0.000	8.201	0.000	0.000	3.248	0.000	11.449
Other operating expenditure							
4J.5 - Renewals expensed in year (infrastructure)	0.000	2.067	0.890	0.000	0.000	101.659	104.616
4J.6 - Renewals expensed in year (non-infrastructure)	0.000	0.004	0.000	0.000	0.010	0.056	0.070
4J.7 - Other operating expenditure excluding renewals	0.050	18.663	5.032	0.000	42.377	94.437	160.559
4J.8 Local authority and cumulo rates	0.000	3.704	2.438	0.234	6.194	37.494	50.064
4J.9 Total operating expenditure (excluding third party services)	11.438	41.367	20.097	0.234	56.856	265.774	395.766
4J.10 Third party services	0.011	1.710	0.182	0.000	1.727	2.814	6.444
4J.11 Total operating expenditure	11.449	43.077	20.279	0.234	58.583	268.588	402.210
B Capital expenditure (excl. atypicals)							
4J.12 Maintaining the long term capability of the assets - infrastructure	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.13 Maintaining the long term capability of the assets - non-infrastructure	0.000	14.083	0.000	0.010	78.957	83.494	176.544
4J.14 Other capital expenditure - infrastructure	0.000	0.252	16.799	0.000	4.472	62.120	83.643
4J.15 Other capital expenditure - non-infrastructure	0.818	18.259	5.249	0.000	87.549	52.244	164.119
4J.16 Infrastructure network reinforcement	0.000	0.000	0.000	0.000	0.000	6.778	6.778
4J.17 Total gross capital expenditure (excluding third party services)	0.818	32.594	22.048	0.010	170.978	204.636	431.084
4J.18 Third party services	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.19 Total gross capital expenditure	0.818	32.594	22.048	0.010	170.978	204.636	431.084
4J.20 Grants and contributions	0.000	-0.113	0.000	0.000	-0.155	-19.559	-19.827
4J.21 Totex	12.267	75.558	42.327	0.244	229.406	453.665	813.467
C Cash expenditure (excl. atypicals)							
4J.22 Pension deficit recovery payments	0.000	2.426	0.404	0.000	4.519	5.823	13.172
4J.23 Other cash items	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.24 Totex including cash items	12.267	77.984	42.731	0.244	233.925	459.488	826.639
D Atypical expenditure							
4J.25 Guaranteed Minimum Pension (GMP) equalisation costs	0.000	0.649	0.108	0.000	1.208	1.556	3.521
4J.26 England & Wales boundary alignment transfer of assets	0.000	1.871	0.120	0.003	11.246	17.902	31.142
4J.27 Item 3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.28 Item 4	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.29 Item 5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.30 Item 6	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.31 Item 7	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.32 Item 8	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.33 Item 9	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.34 Item 10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.35 Total atypical expenditure	0.000	2.520	0.228	0.003	12.454	19.458	34.663
E Total expenditure							
4J.36 Total expenditure	12.267	80.504	42.959	0.247	246.379	478.946	861.302

4K - Atypical expenditure by business unit - Wholesale waste water

Year ended 31 March 2019

Line description		Network+ Sewage Collection			Network+ Sewage Treatment		Sludge			Total
		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
A	Operating expenditure (excl. atypicals)									
4K.1	Power	5.759	1.659	1.101	35.389	1.375	0.035	-11.558	0.003	33.763
4K.2	Income treated as negative expenditure	0.000	0.000	0.000	0.000	0.000	0.000	-18.196	-2.255	-20.451
4K.3	Discharge Consents	3.760	1.083	0.719	5.267	0.205	0.000	0.000	0.000	11.034
4K.4	Bulk discharge	0.006	0.002	0.001	0.011	0.000	0.002	0.002	0.003	0.027
	Other operating expenditure									
4K.5	Renewals expensed in year (infrastructure)	23.813	4.441	4.461	0.000	0.000	0.000	0.000	0.000	32.715
4K.6	Renewals expensed in year (non-infrastructure)	1.062	0.306	0.203	0.026	0.001	0.000	0.000	0.000	1.598
4K.7	Other operating expenditure excluding renewals	26.728	7.701	5.110	77.681	3.018	11.436	24.679	13.382	169.735
4K.8	Local authority and cumulo rates	0.136	0.039	0.026	19.051	0.740	0.042	4.361	0.007	24.402
4K.9	Total operating expenditure (excluding third party services)	61.264	15.231	11.621	137.425	5.339	11.515	-0.712	11.140	252.823
4K.10	Third party services	0.233	0.067	0.045	0.004	0.000	0.000	0.001	0.000	0.350
4K.11	Total operating expenditure	61.497	15.298	11.666	137.429	5.339	11.515	-0.711	11.140	253.173
B	Capital expenditure (excl. atypicals)									
4K.12	Maintaining the long term capability of the assets - infrastructure	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.13	Maintaining the long term capability of the assets - non-infrastructure	13.413	2.179	1.713	84.202	0.698	3.447	53.547	2.790	161.989
4K.14	Other capital expenditure - infrastructure	27.014	22.184	22.184	1.410	0.000	0.000	0.000	0.000	72.792
4K.15	Other capital expenditure - non-infrastructure	5.266	2.293	2.293	100.744	0.000	0.053	1.308	0.000	111.957
4K.16	Infrastructure network reinforcement	3.734	0.467	0.467	0.000	0.000	0.000	0.000	0.000	4.668
4K.17	Total gross capital expenditure (excluding third party services)	49.427	27.123	26.657	186.356	0.698	3.500	54.855	2.790	351.406
4K.18	Third party services	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.19	Total gross capital expenditure	49.427	27.123	26.657	186.356	0.698	3.500	54.855	2.790	351.406
4K.20	Grants and contributions	-7.886	-1.080	-1.080	-12.234	0.000	0.000	0.000	0.000	-22.280
4K.21	Totex	103.038	41.341	37.243	311.551	6.037	15.015	54.144	13.930	582.299
C	Cash expenditure (excl. atypicals)									
4K.22	Pension deficit recovery payments	1.456	0.419	0.278	7.689	0.000	1.399	1.657	0.130	13.028
4K.23	Other cash items	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.24	Totex including cash items	104.494	41.760	37.521	319.240	6.037	16.414	55.801	14.060	595.327
D	Atypical expenditure									
4K.25	Guaranteed Minimum Pension (GMP) equilisation costs	0.389	0.112	0.074	1.978	0.077	0.374	0.478	0.000	3.482
4K.26	Item 2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.27	Item 3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.28	Item 4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.29	Item 5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.30	Item 6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.31	Item 7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.32	Item 8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.33	Item 9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.34	Item 10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4K.35	Total atypical expenditure	0.389	0.112	0.074	1.978	0.077	0.374	0.478	0.000	3.482
E	Total expenditure									
4K.36	Total expenditure	104.883	41.872	37.595	321.218	6.114	16.788	56.279	14.060	598.809

4L - Enhancement expenditure by purpose - Wholesale water

Year ended 31 March 2019

Line description	Expenditure in		
	Water resources		
	Abstraction licences	Raw water abstraction	Raw water transport
	£m	£m	£m
A Enhancement expenditure by purpose			
4L.1 NEP - Making ecological improvements at abstractions (Habitats Directive, SSSI, NERC, BAPs)	0.000	3.730	0.000
4L.2 NEP - Eels Regulations (measures at intakes)	0.000	1.004	0.000
4L.3 NEP - Invasive Non Native Species	0.000	0.000	0.000
4L.4 Addressing low pressure	0.000	0.000	0.000
4L.5 Improving taste/odour/colour	0.000	0.000	0.000
4L.6 Meeting lead standards	0.000	0.000	0.000
4L.7 Supply side enhancements to the supply/demand balance (dry year critical/peak conditions)	0.000	0.000	0.000
4L.8 Supply side enhancements to the supply/demand balance (dry year annual average conditions)	0.818	0.764	0.000
4L.9 Demand side enhancements to the supply/demand balance (dry year critical/peak conditions)	0.000	0.000	0.000
4L.10 Demand side enhancements to the supply/demand balance (dry year annual average conditions)	0.000	0.000	0.000
4L.11 New developments	0.000	0.000	0.000
4L.12 New connections element of new development (CPs, meters)	0.000	0.000	0.000
4L.13 Investment to address raw water deterioration (THM, nitrates, Crypto, pesticides, others)	0.000	0.000	0.000
4L.14 Resilience	0.000	10.615	21.652
4L.15 SEMD	0.000	0.273	0.396
4L.16 NEP - Drinking Water Protected Areas (schemes)	0.000	0.000	0.000
4L.17 NEP - Water Framework Directive measure	0.000	0.000	0.000
4L.18 NEP - Investigations	0.000	0.000	0.000
4L.19 Improvements to river flows	0.000	1.438	0.000
4L.20 Metering (excluding cost of providing metering to new service connections) - meters requested by optants	0.000	0.000	0.000
4L.21 Metering (excluding cost of providing metering to new service connections)- meters introduced by companies	0.000	0.000	0.000
4L.22 Metering (excluding cost of providing metering to new service connections) - other	0.000	0.000	0.000
4L.23 Reservoir Safety	0.000	0.687	0.000
4L.24 Hafren Dyfrdwy asset transfers	0.000	1.871	0.120
4L.38 Total enhancement capital expenditure	0.818	20.382	22.168

report year				Cumulative expenditure on schemes completed in the report year						
Network+				Water resources			Network+			
Raw water storage	Water treatment	Treated water distribution	Total	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	Total
£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
0.000	0.000	0.000	3.730	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.004	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	0.000	0.000	0.000	0.000	0.000
0.000	0.000	6.695	6.695	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	-0.003	-0.004	-0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.021	2.663	2.684	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	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.453	2.035	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	0.000	0.000	0.000	0.000	0.000
0.000	0.000	12.483	12.483	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	34.554	34.554	0.000	0.000	0.000	0.000	0.000	34.554	34.554
0.000	0.000	19.951	19.951	0.000	0.000	0.000	0.000	0.000	19.951	19.951
0.000	2.139	0.442	2.581	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	73.576	34.899	140.742	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	16.214	3.811	20.694	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	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	0.000	0.000	0.000
0.000	0.074	0.000	0.074	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	1.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	5.195	5.195	0.000	0.000	0.000	0.000	0.000	5.195	5.195
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.687	0.000	0.687	0.000	0.000	0.000	0.000	0.687
0.003	11.246	17.902	31.142	0.000	1.871	0.120	0.003	11.246	17.902	31.142
0.003	103.267	139.044	285.682	0.000	2.558	0.120	0.003	11.246	77.602	91.529

4M - Enhancement expenditure by purpose - Wholesale waste water

Year ended 31 March 2019

Line description		Expenditure in report					
		Network+Sewage Collection			Network+Sewage Treatment		Sludge
		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport
		£m	£m	£m	£m	£m	£m
A	Enhancement capital expenditure by purpose						
4M.1	First time sewerage (s101A)	4.422	0.000	0.000	0.000	0.000	0.000
4M.2	Sludge enhancement (quality)	0.000	0.000	0.000	0.000	0.000	0.000
4M.3	Sludge enhancement (growth)	0.000	0.000	0.000	0.000	0.000	0.053
4M.4	NEP - Conservation drivers	0.000	0.000	0.000	0.000	0.000	0.000
4M.5	NEP - Eels Regulations (measures at outfalls)	0.000	0.000	0.000	0.000	0.000	0.000
4M.6	NEP - Event Duration Monitoring at intermittent discharges	0.543	0.068	0.068	0.239	0.000	0.000
4M.7	NEP - Flow monitoring at sewage treatment works	0.108	0.014	0.014	0.048	0.000	0.000
4M.8	NEP - Monitoring of pass forward flows at CSOs	0.000	0.000	0.000	0.000	0.000	0.000
4M.9	NEP - Schemes to increase flow to full treatment	0.000	0.000	0.000	0.000	0.000	0.000
4M.10	NEP - Schemes to increase storm tank capacity	0.000	0.000	0.000	0.000	0.000	0.000
4M.11	NEP - Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	0.022	0.000	0.000	0.008	0.000	0.000
4M.12	NEP - Chemicals monitoring/investigations/options appraisals	0.000	0.000	0.000	1.836	0.000	0.000
4M.13	NEP - National phosphorus removal technology investigations	0.000	0.000	0.000	0.000	0.000	0.000
4M.14	NEP - Groundwater schemes	0.000	0.000	0.000	0.000	0.000	0.000
4M.15	NEP - Investigations	0.000	0.000	0.000	0.000	0.000	0.000
4M.16	NEP - Nutrients (N removal)	0.000	0.000	0.000	0.000	0.000	0.000
4M.17	NEP - Nutrients (P removal at activated sludge STWs)	0.417	0.000	0.000	20.111	0.000	0.000
4M.18	NEP - Nutrients (P removal at filter bed STWs)	0.906	0.000	0.000	42.412	0.000	0.000
4M.19	NEP - Reduction of sanitary parameters	0.000	0.000	0.000	20.039	0.000	0.000
4M.20	NEP - UV disinfection (or similar)	0.000	0.000	0.000	0.000	0.000	0.000
4M.21	NEP - Discharge relocation	0.000	0.000	0.000	0.000	0.000	0.000
4M.22	NEP - Flow 1 schemes	0.000	0.000	0.000	0.000	0.000	0.000
4M.23	Odour	0.000	0.000	0.000	0.331	0.000	0.000
4M.24	New development and growth	8.436	1.055	1.055	0.000	0.000	0.000
4M.25	Growth at sewage treatment works (excluding sludge treatment)	0.000	0.000	0.000	13.872	0.000	0.000
4M.26	Resilience	0.002	0.000	0.000	0.002	0.000	0.000
4M.27	SEMD	0.000	0.000	0.000	0.000	0.000	0.000
4M.28	Reduce flooding risk for properties	0.000	21.741	21.741	0.009	0.000	0.000
4M.29	Transferred private sewers and pumping stations	16.203	2.025	2.025	0.000	0.000	0.000
4M.30	Pollution control strategy (ESL)	1.393	0.041	0.041	3.247	0.000	0.000
4M.31	Improvements to existing permit compliance	0.000	0.000	0.000	0.000	0.000	0.000
4M.32	Non-NEP Quality improvements (voluntary WFD improvement a co-benefit to CM and SDB scheme)	0.000	0.000	0.000	0.000	0.000	0.000
4M.33	Non-NEP investigations into CSOs to inform AMP7 WFD intermittents programme	3.562	0.000	0.000	0.000	0.000	0.000
4M.45	Total enhancement capital expenditure	36.014	24.944	24.944	102.154	0.000	0.053

year	Cumulative expenditure on schemes completed in the report year											
	Sludge		Total	Network+Sewage Collection			Network+Sewage Treatment			Sludge		Total
	Sludge treatment	Sludge disposal		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	
£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	
	0.000	0.000	4.422	4.422	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.422
	0.247	0.000	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.247	0.000	0.247
	0.326	0.000	0.379	0.000	0.000	0.000	0.000	0.000	0.053	0.326	0.000	0.379
	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	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	0.918	0.543	0.068	0.068	0.239	0.000	0.000	0.000	0.000	0.918
	0.000	0.000	0.184	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	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	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	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	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	1.836	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	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	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	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	20.528	0.000	0.000	0.000	34.869	0.000	0.000	0.000	0.000	34.869
	0.000	0.000	43.318	0.000	0.000	0.000	3.165	0.000	0.000	0.000	0.000	3.165
	0.000	0.000	20.039	0.000	0.000	0.000	7.306	0.000	0.000	0.000	0.000	7.306
	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	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.331	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	10.546	8.436	1.055	1.055	0.000	0.000	0.000	0.000	0.000	10.546
	0.000	0.000	13.872	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	0.004	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	43.491	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	20.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	4.722	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.735	0.000	0.735	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	0.000	0.000	3.562	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	1.308	0.000	189.417	13.401	1.123	1.123	45.579	0.000	0.053	0.573	0.000	61.852

4N - Operating expenditure - Sewage treatment - Wholesale waste water

Year ended 31 March 2019

Line description		Network+ £000
A	Costs of STWs in size bands 1 to 5	
4N.1	Direct costs of STWs in size band 1	5843.231
4N.2	Direct costs of STWs in size band 2	2869.812
4N.3	Direct costs of STWs in size band 3	8690.659
4N.4	Direct costs of STWs in size band 4	15592.464
4N.5	Direct costs of STWs in size band 5	13273.577
4N.6	General & support costs of STWs in size bands 1 to 5	7905.399
4N.7	Functional expenditure of STWs in size bands 1 to 5	54175.142
B	Costs of STWs in size band 6	
4N.8	Service charges for STWs in size band 6	3509.751
4N.9	Estimated terminal pumping costs size band 6 works	0.000
4N.10	Other direct costs of STWs in size band 6	54181.553
4N.11	Direct costs of STWs in size band 6	57691.304
4N.12	General & support costs of STWs in size band 6	11106.554
4N.13	Functional expenditure of STWs in size band 6	68797.858
4N.14	Total Functional expenditure for Sewage treatment	122973.000

40 - Large sewage treatment works - waste water

Year ended 31 March 2019

Line description			Units	STWNAMED01	STWNAMED02	STWNAMED03	STWNAMED04	STWNAMED05	STWNAMED06	STWNAMED07	STWNAMED08
A Sewage treatment works - Explanatory variables											
40.1	Works name	text		ABBEEY LATHE - MALTBY (WRW)	ALFRETON (WRW)	BARNHURST (WRW)	BARSTON (WRW)	BRANCOTE (WRW)	BROMSGROVE (WRW)	BURNTWOOD (WRW)	CANNOCK (WRW)
40.2	Classification of treatment works	text		TB2	TB2	TA2	TB2	TB2	TA2	TB1	TA2
40.3	Population equivalent of total load received	000		34.84	32.82	152.38	61.97	75.35	54.25	39.50	62.23
40.4	Suspended solids consent	mg/l		20	25	15	25	45	20	45	25
40.5	BOD ₅ consent	mg/l		10	15	10	10	25	10	25	15
40.6	Ammonia consent	mg/l		5	5	3	3	5	3	15	5
40.7	Phosphorus consent	mg/l		2	2	1	1	2	2	0	1
40.8	UV consent	mW/s/cm ²		0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD ₅ /d		2090	1969	9143	3718	4521	3255	2370	3734
40.10	Flow passed to full treatment	m ³ /d		7,372	9,532	46,699	8,621	21,443	13,954	8,506	16,875

B Sewage treatment works - Functional expenditure											
40.11	Service charges	£000		37.906	40.295	237.152	37.906	0.000	37.906	37.906	40.295
40.12	Estimated terminal pumping expenditure	£000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.13	Other direct expenditure	£000		247.460	352.426	1777.499	368.510	513.508	714.463	206.828	454.668
40.14	Total direct expenditure	£000		285.366	392.721	2014.651	406.416	513.508	752.369	244.734	494.963
40.15	General and support expenditure	£000		50.726	72.243	364.366	75.540	105.263	146.456	42.397	93.201
40.16	Functional expenditure	£000		336.092	464.964	2379.017	481.956	618.771	898.825	287.131	588.164

Line description			Units	STWNAMED09	STWNAMED10	STWNAMED11	STWNAMED12	STWNAMED13	STWNAMED14	STWNAMED15	STWNAMED16
A Sewage treatment works - Explanatory variables											
40.1	Works name	text		CHECKLEY (WRW)	CLAYMILLS (WRW)	COALPORT (WRW)	COLESHILL (WRW)	COVEN HEATH (WRW)	CRANKLEY POINT (WRW)	DERBY (WRW)	DROITWICH-LADYWOOD (WRW)
40.2	Classification of treatment works	text		TA2	TA2	SAS	TA2	TB2	TA2	TA2	TA2
40.3	Population equivalent of total load received	000		50.48	352.84	72.31	236.75	27.99	56.62	331.40	28.87
40.4	Suspended solids consent	mg/l		25	45	45	40	15	45	30	45
40.5	BOD ₅ consent	mg/l		15	25	25	20	10	25	20	25
40.6	Ammonia consent	mg/l		5	10	10	5	3	15	3	10
40.7	Phosphorus consent	mg/l		0	1	0	1	0	2	1	2
40.8	UV consent	mW/s/cm ²		0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD ₅ /d		3029	21170	4339	14205	1679	3397	19884	1732
40.10	Flow passed to full treatment	m ³ /d		13,206	37,692	21,585	76,799	7,202	9,468	94,158	9,022

B Sewage treatment works - Functional expenditure											
40.11	Service charges	£000		37.906	67.446	40.295	116.082	38.934	37.906	120.860	37.906
40.12	Estimated terminal pumping expenditure	£000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.13	Other direct expenditure	£000		365.271	1081.224	461.267	1746.566	288.145	605.928	1654.040	541.220
40.14	Total direct expenditure	£000		403.177	1148.670	501.562	1862.648	327.079	643.834	1774.900	579.126
40.15	General and support expenditure	£000		74.876	221.638	94.554	358.025	59.066	124.208	339.058	110.943
40.16	Functional expenditure	£000		478.053	1370.308	596.116	2220.673	386.145	768.042	2113.958	690.069

40 - Large sewage treatment works - waste water (continued)

Year ended 31 March 2019

Line description	Units	STWNAMED17	STWNAMED18	STWNAMED19	STWNAMED20	STWNAMED21	STWNAMED22	STWNAMED23	STWNAMED24
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A Sewage treatment works - Explanatory variables

40.1	Works name	text	COVENTRY - FINHAM (WRW)	GOSCOTE (WRW)	HAYDEN (WRW)	HEANOR - MILNE HAY (WRW)	HINCKLEY (WRW)	ILKESTON - HALLAM FIELDS (WRW)	KIDDERMINSTER OLDINGTON (WRW)	KIRKBY IN ASHFIELD (WRW)
40.2	Classification of treatment works	text	TA2	SAS	TA2	SB	TB2	TA2	TA2	TA2
40.3	Population equivalent of total load received	000	460.89	114.95	128.14	32.81	48.96	50.61	107.18	28.27
40.4	Suspended solids consent	mg/l	20	30	20	20	30	20	30	25
40.5	BOD ₅ consent	mg/l	15	10	10	10	10	10	20	15
40.6	Ammonia consent	mg/l	3	3	3	5	5	5	10	5
40.7	Phosphorus consent	mg/l	1	0	1	2	1	2	1	2
40.8	UV consent	mW/s/cm ²	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD ₅ /d	27653	6897	7688	1969	2938	3037	6431	1696
40.10	Flow passed to full treatment	m ³ /d	148,067	28,244	41,476	11,153	16,330	11,144	26,403	6,697

B Sewage treatment works - Functional expenditure

40.11	Service charges	£000	69.835	68.210	67.446	40.295	41.059	37.906	0.000	40.295
40.12	Estimated terminal pumping expenditure	£000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.13	Other direct expenditure	£000	2281.473	938.463	1045.961	373.744	416.610	519.242	0.000	344.762
40.14	Total direct expenditure	£000	2351.308	1006.673	1113.407	414.039	457.669	557.148	0.000	385.057
40.15	General and support expenditure	£000	467.674	192.374	214.409	76.613	85.400	106.438	0.000	70.672
40.16	Functional expenditure	£000	2818.982	1199.047	1327.816	490.652	543.069	663.586	0.000	455.729

Line description	Units	STWNAMED37	STWNAMED38	STWNAMED39	STWNAMED40	STWNAMED41	STWNAMED42	STWNAMED43	STWNAMED44
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A Sewage treatment works - Explanatory variables

40.1	Works name	text	NEWTHORPE - STW	NUNEATON - HARSHILL - STW	PACKINGTON (WRW)	RAY HALL (WRW)	REDDITCH (SPERNAL) WRW	ROUNDHILL (WRW)	RUGBY NEWBOLD (WRW)	RUSHMOOR (WRW)
40.2	Classification of treatment works	text	TB2	TA2	0	TB2	TA2	TA2	TA2	TA2
40.3	Population equivalent of total load received	000	45.66	95.20	0.00	134.76	80.09	278.23	97.89	149.38
40.4	Suspended solids consent	mg/l	20	30	0	45	25	20	20	30
40.5	BOD ₅ consent	mg/l	10	15	0	25	15	10	15	15
40.6	Ammonia consent	mg/l	3	5	0	3	5	5	5	5
40.7	Phosphorus consent	mg/l	2	1	0	1	2	1	1	1
40.8	UV consent	mW/s/cm ²	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD ₅ /d	2740	5712	0	8086	4805	16694	5873	8963
40.10	Flow passed to full treatment	m ³ /d	12,884	30,853	0	36,923	26,500	69,184	24,660	21,394

B Sewage treatment works - Functional expenditure

40.11	Service charges	£000	41.059	0.000	0.000	65.057	67.446	135.742	69.835	69.835
40.12	Estimated terminal pumping expenditure	£000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.13	Other direct expenditure	£000	355.069	915.220	0.000	762.730	808.186	1658.304	885.140	790.981
40.14	Total direct expenditure	£000	396.128	915.220	0.000	827.787	875.632	1794.046	954.975	860.816
40.15	General and support expenditure	£000	72.785	187.609	0.000	156.350	165.668	339.932	181.443	162.141
40.16	Functional expenditure	£000	468.913	1102.829	0.000	984.137	1041.300	2133.978	1136.418	1022.957

STWNAMED25	STWNAMED26	STWNAMED27	STWNAMED28	STWNAMED29	STWNAMED30	STWNAMED31	STWNAMED32	STWNAMED33	STWNAMED34	STWNAMED35	STWNAMED36
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LEEK (WRW)	LICHFIELD (WRW)	LONG EATON-TOTON (WRW)	WARWICK-LONGBRIDGE (WRW)	LOUGHBOROUGH (WRW)	LOWER GORNAL (WRW)	MALVERN (WRW)	MANSFIELD-BATH LANE (WRW)	MELTON (WRW)	MINWORTH (WRW)	MONKMOOR (WRW)	NETHERIDGE (WRW)
TA1	TB2	TB2	TB2	TA2	TB2	SB	TA2	TA2	TA2	SAS	TA1
44.94	38.21	66.91	114.51	71.60	37.88	34.98	92.85	64.74	1780.18	92.53	189.08
30	60	25	25	30	45	45	20	45	25	45	45
20	24	15	20	20	25	25	10	20	15	25	25
3	17	5	5	5	10	15	3	5	3	10	15
0	2	1	1	2	2	0	1	2	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0
2696	2293	4015	6871	4296	2273	2099	5571	3884	106811	5552	11345
9,829	8,075	21,789	43,050	20,452	7,828	12,826	26,817	13,806	523,040	29,343	53,696

37.906	40.295	0.000	67.446	67.446	42.684	40.295	5.542	37.906	0.000	134.892	69.835
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
585.075	306.036	430.706	687.404	653.938	414.863	234.450	882.016	562.883	7152.963	596.689	1408.919
622.981	346.331	430.706	754.850	721.384	457.547	274.745	887.558	600.789	7152.963	731.581	1478.754
119.933	62.734	88.289	140.909	134.049	85.042	48.059	180.802	115.384	1466.270	122.314	288.811
742.914	409.065	518.995	895.759	855.433	542.589	322.804	1068.360	716.173	8619.233	853.895	1767.565

STWNAMED45	STWNAMED46	STWNAMED47	STWNAMED48	STWNAMED49	STWNAMED50	STWNAMED51	STWNAMED52	STWNAMED53	STWNAMED54	STWNAMED55	STWNAMED56
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SNARROWS (WRW)	STANLEY DOWNTON (WRW)	STANTON-DERBYSHIRE (WRW)	STAPLEFORD-BESSEL LANE (WRW)	STOKE BARDOLPH (WRW)	STRATFORD-MILCOTE (WRW)	STRONGFORD (WRW)	SUTTON IN ASHFIELD (WRW)	TAMWORTH (WRW)	TRESCOTT (WRW)	WANLIP (WRW)	WHETSTONE (WRW)
TB2	TA2	TB2	TA2	TA2	TB2	TA2	TA2	SB	TB2	TA2	TA2
44.42	87.34	45.55	28.26	604.75	34.35	358.53	34.11	97.69	35.31	681.98	26.13
20	30	45	25	45	60	30	15	50	50	20	40
10	15	25	15	25	25	12	10	25	25	10	20
5	5	15	5	10	20.0	3.0	2.0	10.0	0.0	3.0	10.0
2	2	2	2	1	2.0	1.0	2.0	0.0	2.0	1.0	2.0
0	0	0	0	0	0	0	0	0	0	0	0
2665	5240	2733	1696	36285	2061	21512	2047	5861	2119	40919	1568
11,882	24,806	9,199	8,887	167,862	13253	123309	7634	24064	6538	168860	6036

37.906	40.295	5.042	37.906	119.319	0.000	116.082	38.670	65.057	40.295	186.681	38.670
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
398.254	520.734	306.506	266.235	2781.502	272.030	2548.160	352.573	261.663	207.583	4037.632	221.640
436.160	561.029	311.548	304.141	2900.821	272.030	2664.242	391.243	326.720	247.878	4224.313	260.310
81.637	106.744	62.830	54.575	570.174	55.763	522.342	72.273	53.638	42.552	827.665	45.434
517.797	667.773	374.378	358.716	3470.995	327.793	3186.584	463.516	380.358	290.430	5051.978	305.744

40 - Large sewage treatment works - waste water (continued)

Year ended 31 March 2019

Line description	Units	STWNAMED57	STWNAMED58	STWNAMED59	STWNAMED60	STWNAMED61	STWNAMED62	STWNAMED63	STWNAMED64
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A Sewage treatment works - Explanatory variables

40.1	Works name	text	WIGSTON (WRW)	WILLENHALL (WRW)	WORCESTER - BROMWICH ROAD (WRW)	WORKSOP-MANTON (WRW)	YADDLETHORPE SCUNTHORPE (WRW)	BELPER (WRW)	RAINWORTH (WRW)	DINNINGTON STW
40.2	Classification of treatment works	text	TB2	0	SAS	TB2	SAS	0	0	TA2
40.3	Population equivalent of total load received	000	26.26	0.00	115.15	56.07	118.60	0.00	0.00	28.48
40.4	Suspended solids consent	mg/l	30	0	45	30	45	0	0	30
40.5	BOD ₅ consent	mg/l	15	0	25	15	25	0	0	13
40.6	Ammonia consent	mg/l	5.0	0.0	15.0	3.0	3.0	0.0	0.0	3.0
40.7	Phosphorus consent	mg/l	2.0	0.0	0.0	2.0	0.0	0.0	0.0	1.0
40.8	UV consent	mW/s/cm ²	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD ₅ /d	1576	0	6909	3364	7116	0	0	1709
40.10	Flow passed to full treatment	m ³ /d	7275	0	33334	14029	26740	0	0	7055

B Sewage treatment works - Functional expenditure

40.11	Service charges	£000	35.517	0.000	67.446	40.295	67.446	0.000	0.000	0.000
40.12	Estimated terminal pumping expenditure	£000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.13	Other direct expenditure	£000	277.172	0.000	990.218	763.759	876.431	0.000	0.000	333.444
40.14	Total direct expenditure	£000	312.689	0.000	1057.664	804.054	943.877	0.000	0.000	333.444
40.15	General and support expenditure	£000	56.817	0.000	202.983	156.561	179.658	0.000	0.000	68.352
40.16	Functional expenditure	£000	369.506	0.000	1260.647	960.615	1123.535	0.000	0.000	401.796

Line description	Units	STWNAMED65	STWNAMED66	STWNAMED67	STWNAMED68	STWNAMED69	STWNAMED70	STWNAMED71
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A Sewage treatment works - Explanatory variables

40.1	Works name	text	EARL SHILTON STW	GAINSBOROUGH LEA ROAD	RETFORD STW	TEWKESBURY STW	EVESHAM STW	MILE OAK STW	UTTOXETER (WRW)	RUGELEY (STW)
40.2	Classification of treatment works	text	TB2	TA2	TB2	TA2	TB2	0	0	TB2
40.3	Population equivalent of total load received	000	26.48	28.09	26.29	29.14	27.54	0.00	0.00	26.54
40.4	Suspended solids consent	mg/l	25	60	50	45	45	0	0	60
40.5	BOD ₅ consent	mg/l	15	25	25	25	25	0	0	25
40.6	Ammonia consent	mg/l	5.0	0.0	10.0	5.0	0.0	0.0	0.0	15.0
40.7	Phosphorus consent	mg/l	2.0	2.0	2.0	2.0	2.0	0.0	0.0	2.0
40.8	UV consent	mW/s/cm ²	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD ₅ /d	1589	1685	1577	1748	1652	0	0	1592
40.10	Flow passed to full treatment	m ³ /d	2967	7662	7000	5633	6907	0	0	5081

B Sewage treatment works - Functional expenditure

40.11	Service charges	£000	40.295	37.906	37.906	37.906	56.237	0.000	0.000	37.906
40.12	Estimated terminal pumping expenditure	£000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40.13	Other direct expenditure	£000	178.338	247.705	212.167	241.360	216.244	0.000	0.000	279.353
40.14	Total direct expenditure	£000	218.633	285.611	250.073	279.266	272.481	0.000	0.000	317.259
40.15	General and support expenditure	£000	36.557	50.776	43.492	49.476	44.327	0.000	0.000	57.264
40.16	Functional expenditure	£000	255.190	336.387	293.565	328.742	316.808	0.000	0.000	374.523

4P - Non-financial data for WR, WT and WD

Year ended 31 March 2019

Line	Line description	Units	Current year
A	Water resources		
4P.1	Proportion of distribution input derived from impounding reservoirs	Propn 0 to 1	0.235
4P.2	Proportion of distribution input derived from pumped storage reservoirs	Propn 0 to 1	0.152
4P.3	Proportion of distribution input derived from river abstractions	Propn 0 to 1	0.330
4P.4	Proportion of distribution input derived from groundwater works,excluding managed aquifer recharge (MAR) water supply schemes	Propn 0 to 1	0.282
4P.5	Proportion of distribution input derived from artificial recharge (AR) water supply schemes	Propn 0 to 1	0.000
4P.6	Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes	Propn 0 to 1	0.000
4P.7	Proportion of distribution input derived from saline abstractions	Propn 0 to 1	0.000
4P.8	Proportion of distribution input derived from water reuse schemes	Propn 0 to 1	0.000
4P.9	Number of impounding reservoirs	nr	11
4P.10	Number of pumped storage reservoirs	nr	10
4P.11	Number of river abstractions	nr	6
4P.12	Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	nr	105
4P.13	Number of artificial recharge (AR) water supply schemes	nr	0
4P.14	Number of aquifer storage and recovery (ASR) water supply schemes	nr	0
4P.15	Number of saline abstraction schemes	nr	0
4P.16	Total number of sources	nr	132
4P.17	Number of reuse schemes	nr	0
4P.18	Total number of water reservoirs	nr	26
4P.19	Total capacity of water reservoirs	ML	154485
4P.20	Total number of intake and source pumping stations	nr	244
4P.21	Total number of raw water transport stations	nr	5
4P.22	Total capacity of intake and source pumping stations	kW	51614
4P.23	Total capacity of raw water transfer pumping stations	kW	3691
4P.24	Total length of raw water abstraction mains and other conveyors	km	102.58
4P.25	Average pumping head - raw water abstraction	m.hd	32.94
4P.26	Average pumping head - raw water transport	m.hd	36.79
4P.27	Total length of raw and pre-treated (non-potable) water transport mains	km	628.60
4P.28	Water resources capacity (measured using water resources yield)	ML/d	2173.14
B	Water treatment		
4P.29	Total water treated at all SW simple disinfection works	ML/d	0.00
4P.30	Total water treated at all SW1 works	ML/d	0.00
4P.31	Total water treated at all SW2 works	ML/d	0.00
4P.32	Total water treated at all SW3 works	ML/d	167.09
4P.33	Total water treated at all SW4 works	ML/d	1127.60
4P.34	Total water treated at all SW5 works	ML/d	127.07
4P.35	Total water treated at all SW6 works	ML/d	0.00
4P.36	Total water treated at all GW simple disinfection works	ML/d	143.26
4P.37	Total water treated at all GW1 works	ML/d	23.35
4P.38	Total water treated at all GW2 works	ML/d	12.62
4P.39	Total water treated at all GW3 works	ML/d	0.00
4P.40	Total water treated at all GW4 works	ML/d	285.11
4P.41	Total water treated at all GW5 works	ML/d	91.24
4P.42	Total water treated at all GW6 works	ML/d	0.00
4P.43	Total water treated at more than one type of works	ML/d	0.00
4P.44	Total number of SW simple disinfection works	nr	0
4P.45	Total number of SW1 works	nr	0
4P.46	Total number of SW2 works	nr	0
4P.47	Total number of SW3 works	nr	2
4P.48	Total number of SW4 works	nr	14
4P.49	Total number of SW5 works	nr	3

4P - Non-financial data for WR, WT and WD (continued)

Year ended 31 March 2019

4P.50	Total number of SW6 works	nr	0
4P.51	Total number of GW simple disinfection works	nr	37
4P.52	Total number of GW1 works	nr	5
4P.53	Total number of GW2 works	nr	2
4P.54	Total number of GW3 works	nr	0
4P.55	Total number of GW4 works	nr	58
4P.56	Total number of GW5 works	nr	11
4P.57	Total number of GW6 works	nr	0
4P.58	Number of treatment works requiring remedial action because of raw water deterioration	nr	0
4P.59	Zonal population receiving water treated with orthophosphate	000	6488.061
4P.60	Average pumping head - water treatment	m.hd	14.41

C	Water distribution		
4P.61	Total length of potable mains as at 31 March	km	46814.9
4P.62	Total length of potable mains relined	km	2.9
4P.63	Total length of potable mains renewed	km	232.3
4P.64	Total length of new potable mains	km	141.0
4P.65	Total length of potable water mains (<=320mm)	km	42940.7
4P.66	Total length of potable water mains >320mm - <=450mm	km	1953.5
4P.67	Total length of potable water mains >450mm - <=610mm	km	886.9
4P.68	Total length of potable water mains > 610mm	km	1033.9
4P.69	Capacity of booster pumping stations	kW	107829
4P.70	Capacity of service reservoirs	ML	3031
4P.71	Capacity of water towers	ML	9
4P.72	Distribution input	ML/d	1942.21
4P.73	Water delivered (non-potable)	ML/d	0.38
4P.74	Water delivered (potable)	ML/d	1614.04
4P.75	Water delivered (billed measured residential)	ML/d	449.52
4P.76	Water delivered (billed measured business)	ML/d	371.41
4P.77	Total leakage	ML/d	424.37
4P.78	Distribution losses	ML/d	322.35
4P.79	Water taken unbilled	ML/d	68.23
4P.80	Number of lead communication pipes	nr	635259
4P.81	Number of galvanised iron communication pipes	nr	160700
4P.82	Number of other communication pipes	nr	2841001
4P.83	Number of booster pumping stations	nr	675
4P.84	Total number of service reservoirs	nr	490
4P.85	Number of water towers	nr	18
4P.86	Total length of potable mains laid or structurally refurbished pre-1880	km	35.5
4P.87	Total length of potable mains laid or structurally refurbished between 1881 and 1900	km	245.3
4P.88	Total length of potable mains laid or structurally refurbished between 1901 and 1920	km	3954.3
4P.89	Total length of potable mains laid or structurally refurbished between 1921 and 1940	km	4935.9
4P.90	Total length of potable mains laid or structurally refurbished between 1941 and 1960	km	5010.0
4P.91	Total length of potable mains laid or structurally refurbished between 1961 and 1980	km	9837.3
4P.92	Total length of potable mains laid or structurally refurbished between 1981 and 2000	km	15446.1
4P.93	Total length of potable mains laid or structurally refurbished post 2001	km	7759.1
4P.94	Average pumping head - treated water distribution	m.hd	98.44

D Band Disclosure (nr)			
4P.95	WTWs in size band 1	Nr	38
4P.96	WTWs in size band 2	Nr	23
4P.97	WTWs in size band 3	Nr	28
4P.98	WTWs in size band 4	Nr	20
4P.99	WTWs in size band 5	Nr	11
4P.100	WTWs in size band 6	Nr	6
4P.101	WTWs in size band 7	Nr	2
4P.102	WTWs in size band 8	Nr	4
E Band Disclosure (%)			
4P.103	Proportion of Total DI band 1	%	1.4
4P.104	Proportion of Total DI band 2	%	3.4
4P.105	Proportion of Total DI band 3	%	8.3
4P.106	Proportion of Total DI band 4	%	10.9
4P.107	Proportion of Total DI band 5	%	11.9
4P.108	Proportion of Total DI band 6	%	13.5
4P.109	Proportion of Total DI band 7	%	8.3
4P.110	Proportion of Total DI band 8	%	42.4

4Q - Non-financial data - Properties, population and other

Year ended 31 March 2019

Line description		Units	Current year
A	Properties and population		
4Q.1	Residential properties billed for measured water (external meter)	000	736.620
4Q.2	Residential properties billed for measured water (not external meter)	000	769.550
4Q.3	Business properties billed measured water	000	155.827
4Q.4	Residential properties billed for unmeasured water	000	1764.359
4Q.5	Business properties billed unmeasured water	000	8.915
4Q.6	Total business connected properties at year end	000s	193.823
4Q.7	Total residential connected properties at year end	000s	3443.137
4Q.8	Total connected properties at year end	000	3636.960
4Q.9	Number of residential meters renewed	000	57.282
4Q.10	Number of business meters renewed	000s	2.084
4Q.11	Number of meters installed at request of optants	000	38.543
4Q.12	Number of selective meters installed	000	0.000
4Q.13	Total number of new business connections	000	1.414
4Q.14	Total number of new residential connections	000	23.249
4Q.15	Total population served	000	8545.128
4Q.16	Number of business meters (billed properties)	000	155.827
4Q.17	Number of residential meters (billed properties)	000	1506.169
4Q.18	Company area	km2	17693
B	Other		
4Q.19	Number of lead communication pipes replaced for water quality	nr	15
4Q.20	Total supply side enhancements to the supply demand balance (dry year critical/peak conditions)	ML/d	0.00
4Q.21	Total supply side enhancements to the supply demand balance (dry year annual average conditions)	ML/d	0.00
4Q.22	Total demand side enhancements to the supply demand balance (dry year critical/peak conditions)	ML/d	-15.71
4Q.23	Total demand side enhancements to the supply demand balance (dry year annual average conditions)	ML/d	-15.71
4Q.24	Energy consumption - network plus	MWh	490769
4Q.25	Energy consumption - water resources	MWh	48679
4Q.26	Energy consumption - wholesale	MWh	539448
4Q.27	Mean Zonal Compliance	%	99.94
4Q.28	Compliance Risk Index	nr	8.4
4Q.28	Event Risk Index	nr	238.2
4Q.30	Volume of Leakage above or below the sustainable economic Level	ML/d	-8.603

4R - Non-financial data - Waste water network and sludge

Year ended 31 March 2019

Line	Item description	Unit	Current year
A	Waste water network		
4R.1	Connectable properties served by s101A schemes completed in the report year	nr	19
4R.2	Number of s101A schemes completed in the report year	Nr	3
4R.3	Total pumping station capacity	kW	102784
4R.4	Number of network pumping stations	nr	4539
4R.5	Total number of sewer blockages	nr	46898
4R.6	Total number of gravity sewer collapses	nr	540
4R.7	Total number of sewer rising main bursts/collapses	nr	97
4R.8	Number of combined sewer overflows	nr	2897
4R.9	Number of emergency overflows	nr	736
4R.10	Number of settled storm overflows	nr	306
4R.11	Sewer age profile (constructed post 2001)	km	6772
4R.12	Volume of trade effluent	ML/d	30393.82
4R.13	Volume of waste water receiving treatment at sewage treatment works	ML/yr	1052245.09
4R.14	Length of gravity sewers rehabilitated	km	47
4R.15	Length of rising mains replaced or structurally refurbished	km	6
4R.16	Length of foul (only) public sewers	km	24235
4R.17	Length of surface water (only) public sewers	km	16515
4R.18	Length of combined public sewers	km	12116
4R.19	Length of rising mains	km	2384
4R.20	Length of other waste water network pipework	Km	170
4R.21	Total length of "legacy" public sewers as at 31 March	Km	55419
4R.22	Length of formerly private sewers and lateral drains (s105A sewers)	km	36804

4R - Non-financial data - Waste water network and sludge (continued)

Line	Item description	Unit	Current year
B	Sludge		
4R.23	Total sewage sludge produced, treated by incumbents	ttds/ year	238.9
4R.24	Total sewage sludge produced, treated by 3rd party sludge service provider	ttds/ year	0.0
4R.25	Total sewage sludge produced	ttds/ year	238.9
4R.26	Total sewage sludge produced from non-appointed liquid waste treatment	ttds/ year	1.8
4R.27	Percentage of sludge produced and treated at a site of STW and STC co-location	%	75.92
4R.28	Total sewage sludge disposed by incumbents	ttds/ year	134.6
4R.29	Total sewage sludge disposed by 3rd party sludge service provider	ttds/ year	0.0
4R.30	Total sewage sludge disposed	ttds/ year	134.6
4R.31	Total measure of intersiting 'work' done by pipeline	ttds*km/ year	34
4R.32	Total measure of intersiting 'work' done by tanker	ttds*km/ year	1303
4R.33	Total measure of intersiting 'work' done by truck	ttds*km/ year	105
4R.34	Total measure of intersiting 'work' done (all forms of transportation)	ttds*km/ year	1441
4R.35	Total measure of intersiting 'work' done by tanker (by volume transported)	m3*km/ year	28862437
4R.36	Total measure of 'work' done in sludge disposal operations by pipeline	ttds*km/ year	0
4R.37	Total measure of 'work' done in sludge disposal operations by tanker	ttds*km/ year	35
4R.38	Total measure of 'work' done in sludge disposal operations by truck	ttds*km/ year	5808
4R.39	Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttds*km/ year	5843
4R.40	Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	m3*km/ year	749696
4R.41	Chemical P sludge as percentage of sludge produced at STWs	%	47.09

4S - Non-financial data - Sewage Treatment

Year ended 31 March 2019

Line description	Unit	Treatment categories								Total	Phosphorus	
		Primary	Secondary		Tertiary				<=0.5mg/l		>0.5 to <=1mg/l	
			Activated Sludge	Biological	A1	A2	B1	B2				

A	Load received at sewage treatment works in 2017-18											
4S.1	Load received by STWs in size band 1	kg BOD ₅ /day	77	149	781	112	15	789	47	1971	0	37
4S.2	Load received by STWs in size band 2	kg BOD ₅ /day	0	47	477	17	0	1165	169	1875	0	30
4S.3	Load received by STWs in size band 3	kg BOD ₅ /day	0	526	2405	377	147	4307	2633	10395	295	829
4S.4	Load received by STWs in size band 4	kg BOD ₅ /day	0	3410	9842	221	4573	5975	14544	38564	261	5071
4S.5	Load received by STWs in size band 5	kg BOD ₅ /day	0	4489	5017	1296	19556	0	19477	49834	1683	6918
4S.6	Load received by STWs above size band 5	kg BOD ₅ /day	0	42159	7960	2697	403083	2370	66095	524365	0	385592
4S.7	Total load received	kg BOD₅/day	77	50780	26482	4718	427375	14607	102965	627004	2239	398476
4S.8	Load received from trade effluent customers at treatment works	kg BOD ₅ /day								77187		

B	Number of sewage treatment works at 31 March 2018											
4S.9	STWs in size band 1	nr	67	31	227	17	1	104	4	451	0	3
4S.10	STWs in size band 2	nr	0	2	23	1	0	53	8	87	0	1
4S.11	STWs in size band 3	nr	0	6	37	6	2	80	38	169	5	10
4S.12	STWs in size band 4	nr	0	13	37	1	18	23	44	136	2	18
4S.13	STWs in size band 5	nr	0	4	5	1	22	0	20	52	2	8
4S.14	STWs above size band 5	nr	0	6	2	1	33	1	23	66	0	23
4S.15	Total number of works	nr	67	62	331	27	76	261	137	961	9	63

Line description	Unit	Current year
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C	Population equivalent		
4S.16	Current population equivalent served by STWs	000	10399.522
4S.17	Current population equivalent served by discharge relocation schemes	000s	0.000
4S.18	Current population equivalent served by filter bed STWs with tightened/new P consents	000s	130.165
4S.19	Current population equivalent served by activated sludge STWs with tightened/new P consents	000s	50.480
4S.20	Current population equivalent served by groundwater protection schemes	000s	0.000
4S.21	Current population equivalent served by STWs with a Flow1 driver scheme	000s	0.000
4S.22	Current population equivalent served by STWs with tightened/new N consents	000s	0.000
4S.23	Current population equivalent served by STWs with tightened/new sanitary parameter consents	000s	58.960
4S.24	Current population equivalent served by STWs with tightened/new UV consents	000s	0.000
4S.25	Population equivalent treatment capacity enhancement	000s	19.082

Treatment works consents														
Phosphorus			BOD ₅						Ammonia					
>1mg/l	No permit	Total	<=7mg/l	>7 to <=10mg/l	>10 to <=20mg/l	>20mg/l	No permit	Total	<=1mg/l	>1 to <=3mg/l	>3 to <=10mg/l	>10mg/l	No permit	Total
15	1920	1971	0	57	229	931	754	1971	0	0	387	248	1337	1971
88	1757	1875	0	75	565	1146	89	1875	0	66	577	426	806	1875
801	8470	10395	0	599	4281	5478	36	10395	0	348	5148	1662	3236	10395
5072	28160	38564	0	5803	19380	13381	0	38564	0	3604	25039	4406	5516	38564
24265	16967	49834	0	6578	25624	17632	0	49834	0	8755	31296	3855	5928	49834
78878	59895	524365	0	113053	270789	140523	0	524365	0	282494	201613	34801	5457	524365
109120	117170	627004	0	126165	320867	179093	879	627004	0	295267	264061	45396	22280	627004

1	447	451	0	4	28	117	302	451	0	0	47	27	377	451
4	82	87	0	3	26	53	5	87	0	3	27	19	38	87
13	141	169	0	10	66	92	1	169	0	4	75	32	58	169
15	101	136	0	21	68	47	0	136	0	13	89	14	20	136
26	16	52	0	7	27	18	0	52	0	9	33	4	6	52
31	12	66	0	16	26	24	0	66	0	19	35	9	3	66
90	799	961	0	61	241	351	308	961	0	48	306	105	502	961

4T - Non-financial data - Sludge Treatment

Year ended 31 March 2019

Line	Item description	by Incumbent	by 3rd party sludge service providers
		%	%
A	Sludge treatment process		
4T.1	% Sludge - untreated	0.0	0.0
4T.2	% Sludge treatment process - raw sludge liming	0.0	0.0
4T.3	% Sludge treatment process - conventional AD	59.9	0.0
4T.4	% Sludge treatment process- advanced AD	40.1	0.0
4T.5	% Sludge treatment process - incineration of raw sludge	0.0	0.0
4T.6	% Sludge treatment process - incineration of digested sludge	0.0	0.0
4T.7	% Sludge treatment process - phyto-conditioning/composting	0.0	0.0
4T.8	% Sludge treatment process - other (specify)	0.0	0.0
4T.9	% Sludge treatment process - Total	100.0	0.0
B	(Un-incinerated) sludge disposal route		
4T.10	% Sludge disposal route - landfill, raw	0.0	0.0
4T.11	% Sludge disposal route - landfill, partly treated	0.0	0.0
4T.12	% Sludge disposal route - land restoration/reclamation	0.0	0.0
4T.13	% Sludge disposal route - sludge recycled to farmland	100.0	0.0
4T.14	% Sludge disposal route - other (specify)	0.0	0.0
4T.15	% Sludge disposal route - Total	100.0	0.0%

4U - Non-financial data - Properties, population and other

Year ended 31 March 2019

Line	Item description	Unit	Current year
A	Properties and population		
4U.1	Residential properties connected during the year	000	30.036
4U.2	Business properties connected during the year	000	1.202
4U.3	Residential properties billed unmeasured sewage	000	2054.559
4U.4	Residential properties billed measured sewage	000	1641.190
4U.5	Residential properties billed for sewage	000	3695.749
4U.6	Business properties billed unmeasured sewage	000	27.504
4U.7	Business properties billed measured sewage	000	142.983
4U.8	Business properties billed for sewage	000	170.487
4U.9	Void properties	000	283.749
4U.10	Total number of properties	000s	4149.985
4U.11	Resident population	000	9113.072
4U.12	Non-resident population	000	50.546
B	Other		
4U.13	Energy consumption - network plus	MWh	400625.729
4U.14	Energy consumption - sludge	MWh	119833.064
4U.15	Energy consumption - wholesale	MWh	520458.793
4U.16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs)	000s	143.973
4U.17	Total sewerage catchment area	km2	2454
4U.18	Designated bathing waters	nr	0
4U.19	Number of intermittent discharge sites with event duration monitoring	nr	454
4U.20	Number of monitors for flow monitoring at STWs	Nr	0
4U.21	Number of odour related complaints	nr	252
4U.22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives	m3	0
4U.23	Total volume of network storage	m3	21468567

4V - Operating costs analysis - water resources

Year ended 31 March 2019

Line	Item description	Unit	Impounding Reservoir	Pumped Storage	River Abstractions	Groundwater, excluding MAR water supply schemes	Artificial Re-charge (AR) water supply schemes	Aquifer Storage and Recovery (ASR) water supply schemes	Total
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Water resources

A Opex analysis

4V.1	Power	£m	0.298	0.557	2.345	5.803	0.000	0.000	9.003
4V.2	Income Treated as negative expenditure	£m	-0.275	0.000	0.000	0.000	0.000	0.000	-0.275
4V.3	Abstraction charges/discharge consents	£m	2.374	0.000	6.099	2.915	0.000	0.000	11.388
4V.4	Bulk supply	£m	8.201	0.000	0.000	0.000	0.000	0.000	8.201
Other direct operating expenditure									
4V.5	- Renewals expensed in year (infrastructure)	£m	2.067	0.000	0.000	0.000	0.000	0.000	2.067
4V.6	- Renewals expensed in year (non-infrastructure)	£m	0.000	0.001	0.000	0.003	0.000	0.000	0.004
4V.7	- Other operating expenditure excluding renewals - direct	£m	2.913	0.828	3.918	4.762	0.000	0.000	12.421
4V.8	- Other operating expenditure excluding renewals - indirect	£m	1.470	0.418	1.977	2.427	0.000	0.000	6.292
4V.9	Total functional expenditure	£m	17.048	1.804	14.339	15.910	0.000	0.000	49.101
4V.10	Local authority and cumulo rates	£m	1.750	0.821	0.942	0.191	0.000	0.000	3.704
4V.11	Total operating expenditure (excluding third party services)	£m	18.798	2.625	15.281	16.101	0.000	0.000	52.805
4V.12	Depreciation	£m	1.271	0.213	2.292	5.157	0.000	0.000	8.933
4V.13	Total operating costs (excluding third party services)	£m	20.069	2.838	17.573	21.258	0.000	0.000	61.738

Line	Item description	Unit	Water resources	Raw water distribution	Water treatment	Treated water distribution	Total
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B Other expenditure - wholesale water

4V.14	Employment costs - directly allocated	£m	12.193	2.546	21.059	65.984	101.782
4V.15	Employment costs - indirectly allocated	£m	6.694	2.678	11.360	17.469	38.201
4V.16	Number FTEs consistent - directly allocated	Nr	231	52	409	1311	2003.362
4V.17	Number FTEs consistent - indirectly allocated	Nr	91	37	155	238	520.809
4V.18	Costs associated with Traffic Management Act	£m	0.000	0.000	0.000	0.975	0.975

C Service charges

4V.19	Canal & River Trust service charges and discharge consents	£m	0.000	0.000	0.000	0.000	0.000
4V.20	Environment Agency service charges/discharge consents	£m	11.388	0.000	0.391	0.000	11.779
4V.21	Other abstraction charges/discharge consents	£m	0.000	0.000	0.000	0.000	0.000
4V.22	Statutory water softening	£m	0.000	0.000	0.000	0.000	0.000

4W Operating cost analysis - sludge transport, treatment and disposal

Year ended 31 March 2019

Line	Item description	Unit	Pipeline	Tanker	Truck	Truck
A	Sludge transport method					
4W.1	Power	£m	0.001	0.031	0.003	0.035
4W.2	Income Treated as negative expenditure	£m	0.000	0.000	0.000	0.000
4W.3	Discharge consents	£m	0.000	0.000	0.000	0.000
4W.4	Bulk supply	£m	0.000	0.002	0.000	0.002
	Other operating expenditure					
4W.5	- Renewals expensed in year (infrastructure)	£m	0.000	0.000	0.000	0.000
4W.6	- Renewals expensed in year (non-infrastructure)	£m	0.000	0.000	0.000	0.000
4W.7	- Other operating expenditure excluding renewals - direct	£m	0.225	8.628	0.695	9.548
4W.8	- Other operating expenditure excluding renewals - indirect	£m	0.045	1.706	0.137	1.888
4W.9	Total functional expenditure	£m	0.271	10.367	0.835	11.473
4W.10	Local authority and cumulo rates	£m	0.001	0.038	0.003	0.042
4W.11	Total operating expenditure (excluding third party services)	£m	0.272	10.405	0.838	11.515
4W.12	Depreciation	£m	0.001	0.025	0.002	0.028
4W.13	Total operating costs (excluding third party services)	£m	0.273	10.430	0.840	11.543

B	Sludge treatment type	Untreated sludge	Raw sludge liming	Conventional AD	Advanced AD	Incineration of raw sludge	Incineration of digested Sludge	Photo-conditioning/ composting	Other	Total
4W.14	Power	£m	0.000	0.000	-6.196	-5.362	0.000	0.000	0.000	-11.558
4W.15	Income treated as negative expenditure	£m	0.000	0.000	-7.115	-11.081	0.000	0.000	0.000	-18.196
4W.16	Discharge consents	£m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4W.17	Bulk supply	£m	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.002
	Other operating expenditure									
4W.18	- Renewals expensed in year (infrastructure)	£m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4W.19	- Renewals expensed in year (non-infrastructure)	£m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4W.20	Other direct operating expenditure	£m	0.000	0.000	16.157	6.349	0.000	0.000	0.000	22.506
4W.21	Other indirect operating expenditure	£m	0.000	0.000	1.559	0.614	0.000	0.000	0.000	2.173
4W.22	Total functional expenditure	£m	0.000	0.000	4.406	-9.479	0.000	0.000	0.000	-5.073
4W.23	Local authority and cumulo rates	£m	0.000	0.000	2.612	1.749	0.000	0.000	0.000	4.361
4W.24	Total operating expenditure (excluding third party services)	£m	0.000	0.000	7.018	-7.730	0.000	0.000	0.000	-0.712
4W.25	Depreciation	£m	0.000	0.000	14.839	5.718	0.000	0.000	0.000	20.557
4W.26	Total operating costs (excluding third party services)	£m	0.000	0.000	21.857	-2.012	0.000	0.000	0.000	19.845

C	Sludge disposal route	Landfill, raw	Landfill, partly treated	Land restoration/ reclamation	Sludge recycled to farmland	Other	Total
4W.27	Power	0.000	0.000	0.003	0.000	0.000	0.003
4W.28	Income treated as negative expenditure	0.000	0.000	-2.255	0.000	0.000	-2.255
4W.29	Discharge consents	0.000	0.000	0.000	0.000	0.000	0.000
4W.30	Bulk supply	0.000	0.000	0.003	0.000	0.000	0.003
	Other operating expenditure						
4W.31	- Renewals expensed in year (infrastructure)	0.000	0.000	0.000	0.000	0.000	0.000
4W.32	- Renewals expensed in year (non-infrastructure)	0.000	0.000	0.000	0.000	0.000	0.000
4W.33	Other direct operating expenditure	0.000	0.000	11.508	0.000	0.000	11.508
4W.34	Other indirect operating expenditure	0.000	0.000	1.874	0.000	0.000	1.874
4W.35	Total functional expenditure	0.000	0.000	11.133	0.000	0.000	11.133
4W.36	Local authority and cumulo rates	0.000	0.000	0.007	0.000	0.000	0.007
4W.37	Total operating expenditure (excluding third party services)	0.000	0.000	11.140	0.000	0.000	11.140
4W.38	Depreciation	0.000	0.000	3.166	0.000	0.000	3.166
4W.39	Total operating costs (excluding third party services)	0.000	0.000	14.306	0.000	0.000	14.306

4W Operating cost analysis - sludge transport, treatment and disposal (cont.)

Year ended 31 March 2019

Other expenditure - Wholesale waste water		Unit	Network plus sewage collection	Network plus sewage treatment	Sludge	Total
Line	Item description					
D	Opex analysis					
4W.40	Employment costs - directly allocated	£m	16.915	40.993	18.094	76.002
4W.41	Employment costs - indirectly allocated	£m	8.676	20.179	8.254	37.109
4W.42	Number FTEs - directly allocated	Nr	376	906	252	1534
4W.43	Number FTEs - indirectly allocated	Nr	118	290	118	526
4W.44	Costs associated with Traffic Management Act	£m	0.151	0.000	0.000	0.151
4W.45	Costs associated with Industrial Emissions Directive	£m	0.000	0.000	0.139	0.139
E	Service charges					
4W.46	Canal & River Trust service charges and discharge consents	£m	0.000	2.014	0.000	2.014
4W.47	Environment Agency service charges/discharge consents	£m	3.466	5.554	0.000	9.020
4W.48	Other service charges/permits	£m	0.000	0.000	0.000	0.000

Supplementary disclosures

Year ended 31 March 2019

a) Borrowings and intercompany lending

Amounts paid to associated companies in the year and related payable balances at the year end are outlined below:

	Amounts paid £m	Interest rate %	Payable balance £m
Severn Trent Plc	533.152	LIBOR + 0.525%	-
Hafren Dyfrdwy Cyfyngedig	41.350	3.635%	-
Water Plus Group Limited	1,200.005	LIBOR + 1.600%	-

Amounts received from associated companies in the year and related receivable balances at the year end are outlined below:

	Amounts received £m	Interest rate %	Receivable balance £m
Severn Trent Plc	443.594	LIBOR + 0.725%	81.639
Hafren Dyfrdwy Cyfyngedig	23.056	3.635%	22.861
Hafren Dyfrdwy Cyfyngedig	22.839	LIBOR + 1.500%	26.206
Water Plus Group Limited	1,202.259	LIBOR + 1.600%	100.000

b) Transfer of assets/liabilities, omissions, waivers, guarantees

Following the England and Wales boundary alignment on 1 July 2018, assets with a net book value of £107.269 million were transferred from Severn Trent Water Limited to Hafren Dyfrdwy Cyfyngedig and assets with a net book value of £31.142 million were transferred from Hafren Dyfrdwy Cyfyngedig to Severn Trent Water Limited during the year.

In addition, legacy net customer debt of £1.461 million was transferred from Severn Trent Water Limited to Hafren Dyfrdwy Cyfyngedig and £8.440 million of net customer debt was transferred from Hafren Dyfrdwy Cyfyngedig to Severn Trent Water Limited.

On 28 March 2019 a de-gearing exercise was implemented to bring gearing in line with Ofwat's notional capital structure for AMP 7 and to reduce finance costs to a more sustainable level. 132,810,685 Ordinary shares of £1 each at par were issued in exchange for:

- Repayment of £76,861,364 of an inter-company loan with Severn Trent Water Limited at par; and
- Repayment of £34,000,000 of an index-linked loan from Severn Trent Water Limited together with a premium on redemption of £21,949,321.

c) Supply of services

Services supplied by the appointee to associated companies are outlined below.

Service	Company	Turnover of associate in the period £m	Terms of supply	Value £m
Pass through of management charges	Etwall Land Limited	-	Cost	0.047
Pass through of management charges	Midlands Land Portfolio Limited	22.307	Cost	0.623
Pass through of management charges	Severn Trent Plc	-	Cost	6.434
Pass through of management charges	Severn Trent Green Power Limited	15.982	Cost	1.081
Pass through of management charges	Severn Trent Services Operations UK Limited	33.334	Cost	1.333
Pass through of management charges	Severn Trent Wind Power Limited	2.219	Cost	0.068
Pass through of management charges	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	2.432
Retail support services	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	0.721
Wholesale support services	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	1.068
Bulk water supplies	Hafren Dyfrdwy Cyfyngedig	31.983	Tariff	2.151
Bulk waste water supplies	Hafren Dyfrdwy Cyfyngedig	31.983	Tariff	0.024
Records management	Severn Trent Data Portal Limited	0.925	Market tested	0.380
Water supply and waste disposal	Severn Trent Services Defence Limited	43.174	Tariff	0.029
Sale of crops	Severn Trent Green Power Limited	15.982	Cost	0.430
Water operational services	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	1.802
Waste water operational services	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	0.557
Treatment of imported sludge	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	0.217
Tankering fleet services	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	0.089
Wholesale charge	Water Plus Select Limited	918.257	Tariff	334.958
Sale of property overages	Midlands Land Portfolio Limited	22.307	Market tested	7.194
				361.638

Services received by the appointee from associated companies are outlined below.

Service	Company	Turnover of associate in the period £m	Terms of supply	Value £m
Bulk water supplies	Hafren Dyfrdwy Cyfyngedig	31.983	Tariff	0.406
Bulk waste water supplies	Hafren Dyfrdwy Cyfyngedig	31.983	Tariff	0.027
Supply of electricity	Severn Trent Green Power Limited	15.982	Market tested	2.026
Supply of electricity	Severn Trent Wind Power Limited	2.219	Market tested	0.116
Pass through of management charges	Severn Trent Plc	-	Cost	1.454
Water operational services	Hafren Dyfrdwy Cyfyngedig	31.983	Cost	0.809
				4.838

d) Service provided to the non appointed business

Service	Basis of recharge	Value of recharge £m
Treatment of imported sludge*	Direct and indirect costs including use of asset and financing charges	0.375
Treatment of tankered waste	Direct and indirect costs including use of asset and financing charges	2.393
Property searches services	Direct and indirect costs including use of asset and financing charges	0.025
Sewer blockages	Direct and indirect costs only (assets provided by contractor)	0.284
Other water companies billing activities	Direct and indirect costs including use of asset and financing charges	0.577
Plumbing and drainage insurance introducer services	Direct and indirect costs including use of asset and financing charges	0.203
Rental income	Direct and indirect costs including use of asset and financing charges	0.048
		3.905

* Excluding services to Hafren Dyfrdwy already recorded in Supply of services table

e) Group relief charges for tax losses

Charges are made between UK entities for the receipt of tax losses within the Severn Trent Group at the prevailing corporation tax rate in the period (FY19 - 19%).

Company	Turnover of associate in the period £m	Terms of supply	Value £m
Hafren Dyfrdwy Cyfyngedig	31.883	Cost	6.583
Charles Haswell and Partners Limited	-	Cost	0.019
Severn Trent Draycote Limited	-	Cost	10.658
Severn Trent Finance Holdings Limited	-	Cost	3.175
Severn Trent Green Power Limited	15.982	Cost	1.673
Severn Trent Green Power Holdings Limited	-	Cost	0.028
Severn Trent Green Power Group Limited	0.550	Cost	0.039
Severn Trent Green Power (Ardley) Limited	0.367	Cost	0.038
Severn Trent Green Power (Hertfordshire) Limited	0.418	Cost	0.007
Severn Trent Green Power (North London) Limited	1.748	Cost	0.004
Severn Trent Investment Holdings Limited	-	Cost	2.943
Severn Trent Plc	-	Cost	1.670
Severn Trent Retail and Utility Services Limited	0.055	Cost	0.016
Severn Trent Services Purification Limited	-	Cost	0.003
Severn Trent Services (Water and Sewerage) Limited	0.683	Cost	0.020
Severn Trent Systems Limited	-	Cost	0.013
Severn Trent Trimble Limited	-	Cost	(0.745)
Severn Trent Utility Services Limited	-	Cost	0.001
Severn Trent Wind Power Limited	2.219	Cost	0.133
Severn Trent (W&S) Limited	-	Cost	5.887
			32.165

Assurance Summary 2018/19

1. About this document

At Severn Trent we're responsible for providing water and waste water services to over 9 million customers in the Midlands area. We strive to achieve the highest quality standards in everything we do. Whether it's the quality of our drinking water or the regulatory performance information we publish on our website, we want to make sure that our customers can trust us to deliver what matters to them most.

The quality of the regulatory information we publish is important because it helps to give our customers and other stakeholders' confidence that we're being open and honest. Not only about where we're delivering on our commitments to them, but also where we're not.

To help to secure this confidence, we use assurance to thoroughly test information we publish in a manner that is independent and verifiable. Our Board oversees this process through our established governance and assurance framework.

What is assurance?

We perform 'assurance' to check that the information we provide is robust, accurate and complete. Examples of assurance may include checking that a spreadsheet has no formula errors, that a customer call has been recorded accurately on our systems or consulting with our customer challenge group on our plans for vulnerable customers. You can read more about the levels of assurance we apply in section 3.

Ofwat's Company Monitoring Framework

On an annual basis, Ofwat assesses the level of trust that it has in the data we produced and assesses against three categories:

- **Self-assured** - indicating a high level of trust. Companies who are self-assured have greater levels of freedom to dictate their own assurance plans for the reporting year.
- **Targeted** - indicating a sufficient level of trust, however Ofwat dictates some areas that must receive assurance. Targeted companies must also publish an annual statement of risks, strengths and weaknesses and an accompanying assurance plan.
- **Prescribed** - indicating that Ofwat has concerns with the information provided and dictates what information should be assured by the company as well as the requirement to publish an annual statement of risks, strengths and weaknesses and an accompanying assurance plan.

This process is known as the Company Monitoring Framework ('CMF'). Under the CMF, we publish assurance and compliance documents throughout the year as shown in Fig 1. By doing this, we make sure that our regulatory publications can be trusted by our customers and our stakeholders.

What is the Company Monitoring Framework?

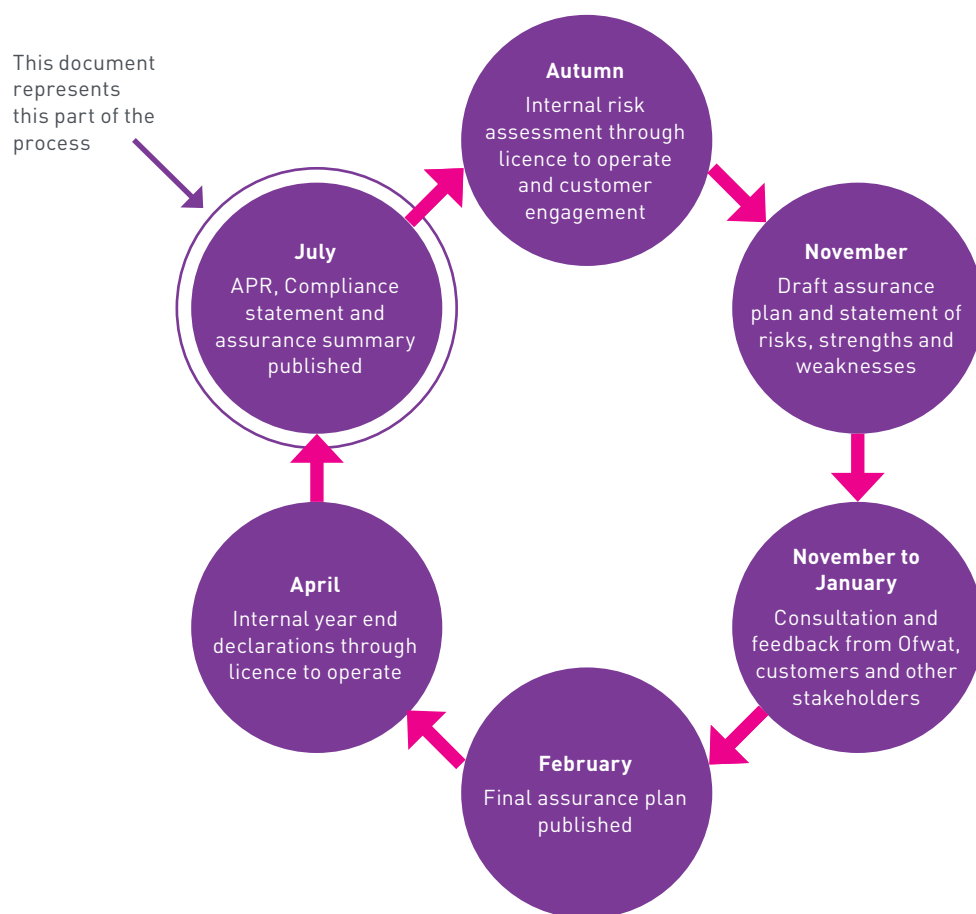
Ofwat's company monitoring framework (published in June 2015) set out its expectations for how it will oversee information that we, and the 16 other largest water companies, provide to our customers.

For more information please visit Ofwat's website - [ofwat.gov.uk](https://www.ofwat.gov.uk)

Understanding your views

In November 2018, we published our Statement of risks, strengths and weaknesses and our draft Assurance plan for consultation. In addition to publishing this document on our website, we proactively contacted our key stakeholders to let them know we wanted to hear their views. As a result, we considered the feedback received and wider industry trends to produce our final assurance plan published in February 2019.

This document summarises the outcome of the assurance we have undertaken for the 2018/19 regulatory reporting year and considers requirements for 2019/20 onwards. Its main focus is the data assurance undertaken for our Annual Performance Report ('APR'), but also considers the outcome of our assurance activities more broadly.

Fig 1: The Company Monitoring Framework cycle

This document contains the following information:

- A glossary to ensure you can understand any abbreviations used in this document.
- Information on our governance and assurance framework, which covers our Board arrangements and the different levels of assurance we apply.
- An overview of our internal compliance assessment framework - licence to operate - which helps us determine our greatest areas of risk.
- Details of the customer and stakeholder engagement we undertook to produce our final Assurance plan.
- Details and outcomes of the assurance undertaken for our APR.
- Outcomes of assurance on other areas that we committed to reviewing in our final Assurance plan.

We recommend that this document is read in conjunction with our Board, governance and compliance section on page 12 of the APR, which includes our formal regulatory statements and our departures from compliance for this regulatory reporting year.

Changes this year

In July 2018, we aligned the boundaries of the two largest regulated water companies within the Severn Trent Plc group - Severn Trent Water and Dee Valley Water - to match the boundary between England and Wales. Severn Trent Water now serves customers in England, while our new company - Hafren Dyfrdwy, serves customers in Wales. This realignment has necessitated a change in how we report performance data and how we operate to ensure we fairly protect the interests of customers of both companies. Our assurance

of our APR reflects this change as two technical auditors reviewed our data during this report year. Jacobs, our established technical assurer, provided assurance for the majority of our non-financial data. In addition, Black & Veatch provided assurance on the legacy Dee Valley Water performance commitments ('PCs') for our customers in the Chester area from 1 July 2018.

2. Glossary

To help to explain all the terms in this document, we've included the table below.

Term	Definition
AIM	Abstraction Incentive Mechanism - AIM encourages water companies to reduce the environmental impact of abstracting water at environmentally sensitive sites when water is scarce.
AMP	Asset Management Period - this refers to Ofwat's 5 year planning period. For example, we are currently in AMP6. AMP7 will start in 2020.
APR	Annual Performance Report - includes information about whether we've achieved our PCs in a given year, and our financial performance - based on the accounting conventions in Ofwat's Regulatory Accounting Guidelines.
ARA	Annual Report and Accounts - includes our annual financial statements based on International Financial Reporting Standards.
Assurance	A process that challenges the validity of our data and methodology.
CCWater	Consumer Council for Water - the statutory consumer representative body for the water industry.
Group compliance & assurance	Our team in Severn Trent that monitors compliance with our statutory and regulatory duties in our appointed business.
ERM	Enterprise Risk Management - our system of identifying and managing risks within Severn Trent Plc.
HD	Hafren Dyfrdwy Cyfyngedig - the regulated water company within Severn Trent Plc whose area of appointment covers North East and mid-Wales.
Internal Audit	Reporting directly to the Severn Trent Plc Audit Committee, the Internal Audit team provides independent assessment of the effectiveness of our processes, controls and risk mitigation strategies.
K Factor	K Factor is the price limit that companies can increase or decrease prices charged to customers. This is reviewed and determined by Ofwat.
MOSL	The market operator for England's competitive non-household market.
NAV	New appointments and variations - Companies which provide a water and/or waste water service to customers in an area which was previously provided by an incumbent provider.
ODI	Outcome Delivery Incentives are individual performance measures, some of which have a financial reward or penalty attached to them. They are a sub component of our PCs (below).
Ofwat	The Water Services Regulation Authority - the statutory economic regulator for the water industry.
PC	Performance Commitment - the level of performance we've committed to deliver either annually or during the five-year period covered by business plans.
PDT	Process Description Template - Internal documents which describe the process by which data is produced for many of regulatory publications. These documents include step by step guides for obtaining data from company systems, controls, risks and assumptions.
PR19	Price Review 2019 - Every five years we publish our proposals for the next five year period. Ofwat reviews this and decides whether our plans are suitable in a determination process.
RACI	Responsible, Accountable, Consulted, Informed - a RACI details who is responsible for managing a duty or obligation, who is accountable and who should be consulted or informed of any changes.
RAG	Regulatory Accounting Guidelines - Every year Ofwat publishes guidance on how companies should complete their financial and non-financial tables for the ARA and APR.
RoRE	Return on Regulatory Equity - an indicator of the return generated by our regulated business.
SLA	Service Level Agreement - we have timescales and minimum levels of performance in place both internally and with our contractors.
STW/SVE	Severn Trent Water Limited - the regulated water company within Severn Trent Plc whose area of appointment covers the Midlands, and the subject of this document. SVE is often used by our auditors to denote when the subject matter concerns STW post boundary realignment.
ST Plc	Severn Trent Plc - the parent company and ultimate controller of Severn Trent Water and Hafren Dyfrdwy.
Third Party Auditor	An independent audit company or organisation that performs audit or assurance services.
Water Forum	Our Customer Challenge Group, which includes independent experts, CCWater, our regulators including the Environment Agency, Natural England and other regional stakeholders.

3. Our governance and assurance framework

Over the last decade we've worked to continuously improve our assurance approach, but it all starts with the right behaviours and values.

Starting with the right behaviours

Assurance alone isn't infallible, and we believe to ensure balanced reporting that our customers and stakeholders can have confidence in, starts with the values of our Company, our people and our behaviours.

Our Board recognises the importance of its role in setting the tone for Severn Trent Water's culture and making sure that it is embedded throughout. Our Code of conduct, 'Doing the Right Thing', sets out clearly defined values and standards of behaviour that we expect from everyone who works for, and with, Severn Trent Water. These values embody the principles by which the Company operate, and provide a consistent framework for responsible business practices. The supporting policies codify how to identify and deal with suspected wrongdoing, fraud or malpractice; how to ensure that the highest standards of safety are maintained; and how to apply good ethics and sound judgment.

Our Board continually monitors, assesses and reinforces the Company's values and culture to satisfy itself that the behaviours throughout the business are aligned with the Company's purpose. Where misalignment is identified by our Board, appropriate corrective action is taken. Additional detail can be found in the Severn Trent Plc ARA on the Severn Trent Plc website.

Every day our people have to make choices about what they do and how they do it. Most of the time it is clear what the right thing to do is, whether it is about doing what's safe, doing the right thing for customers, doing what is right ethically and indeed what is right legally. But sometimes it's not so clear, so Doing the Right Thing, details the five values we work by, to help guide our people through those grey areas when there are no hard rules in place:

1. We put our customers first.
2. We are passionate about what we do.
3. We act with integrity.
4. We protect our environment.
5. We're inspired to create an awesome company.

These values apply to how we report information just as much as any other area of what we do.

A continuously evolving assurance approach

The assurance processes we use come from best practice identified across many organisations and industries ensuring that managers, senior managers and Directors are responsible for delivering high quality data through robust processes and methodologies.

Our established framework is underpinned by four main principles (as shown in Fig 2 below) which, while providing consistency and clarity for our people, allow the flexibility for our assurance processes to build and evolve with our Company and the environment we operate in. For example:

- A risk based approach to assurance i.e. targeting areas of greatest importance with three lines of assurance at the areas that matter most or are high risk. This approach ensures that our assurance programme maintains value for money while also giving confidence to our customers and stakeholders that the information they value is trustworthy.
- Implementing a twice yearly assurance process for our PCs to ensure that any potential areas of non-compliance are noted at the mid-year point. This gives us the opportunity to rectify the issues before year end. In particular, we perform detailed reviews of our PCs that have financial incentives associated with them to give our customers assurance that we are appropriately rewarded or penalised for our performance.

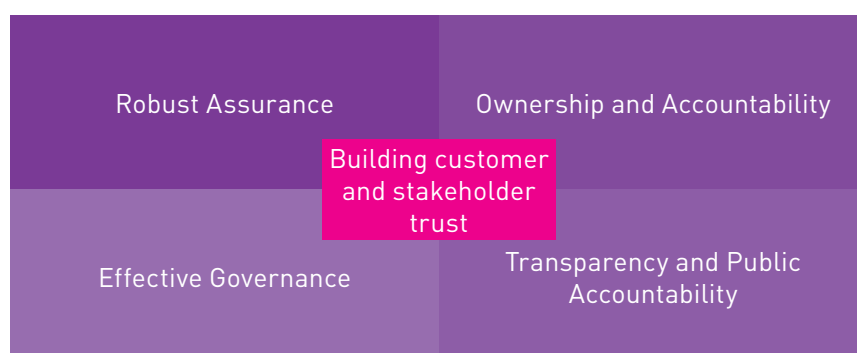


Fig 2: Our assurance principles

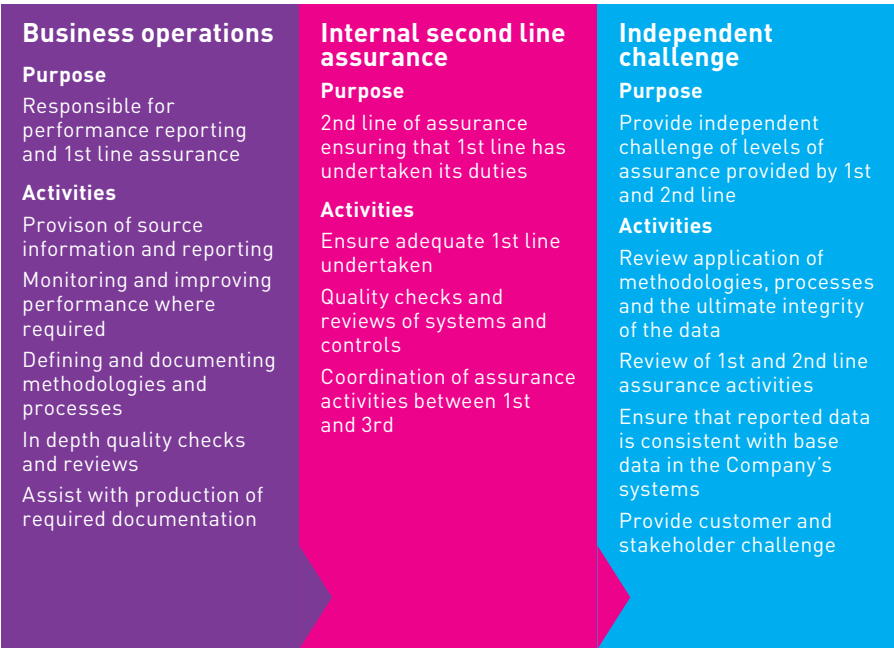
3.1 Robust assurance

To ensure we’re applying an effective programme of assurance, while balancing value for money, we operate a three lines of assurance model. We target this model using a risk based approach so areas that we know are of prime importance to customers or may have a significant financial value or operational impact receive the full three lines of assurance while other areas may be targeted with first or second line only. This approach ensures our spending on assurance is proportionate and aligns to what our customers’ value most. Fig 3 below details the three lines and the typical activities that each level is responsible for.

First line activities are embedded within the teams that are responsible for reporting the performance so that colleagues with the right expertise are conducting in-depth quality checks at the time the data is produced.

Second line activities are then conducted by a separate team that does not report into the same senior manager as the first line to ensure a level of independent checking is conducted. For elements of our APR, second line functions are embedded within the same directorate as the performance reporting. This ensures that we maintain a strong level of expertise and understanding of the source data.

Fig 3: Our Levels of Assurance



Third line activities are conducted by a number of different providers depending on the specialisation required. Generally the expertise can be divided into the following categories:

- **Engineering/technical** - where assurance requires an expert engineering/water industry technical background.
- **Regulatory** - where challenge is required around the methodology used and assumptions against our regulatory requirements.
- **Data integrity and consistency** - understanding the flow of data from source through to our final publications ensuring no data transposition errors are made.
- **Financial** - used for areas requiring specific financial expertise, such as pensions.
- **Model integrity** - where a complex financial model is used and requires specialist external expertise to test and challenge.

We use a combination of assurance providers for third line activity. The majority of our assurance is provided by the following:

- **Jacobs** - typically review non-financial operational performance processes and data. Also responsible for cost allocation activities and financial reporting processes.
- **Deloitte** - our financial data auditor.
- **Internal Audit** - internal control reviews, data audits and other ad-hoc audits.
- **Black & Veatch** - review non-financial operational performance process and data in respect of the Chester area only.

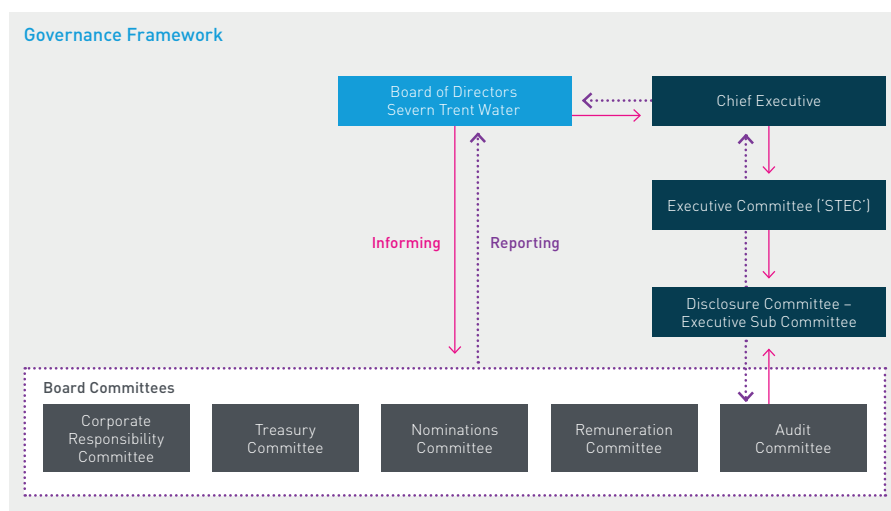
3.2 Ownership and accountability

We have clear lines of ownership for both the delivery of performance, and the accuracy of the data provided through our 'licence to operate' process, which every year assigns ownership of all of our statutory and legal obligations in our appointed business to managers, senior managers and Directors. These managers are responsible for ensuring compliance with our duties and raising potential risks or issues of non-compliance. Any areas that are noted as non-compliant are disclosed by the Board as departures in its annual Risk and compliance statement following review, scrutiny and remedial action by our senior leadership team and Severn Trent Plc's Disclosure and Audit Committees.

Section 4 includes more information on our licence to operate process.

3.3 Effective governance

As the principal operating subsidiary of a FTSE100 company we have a strong history of well-established governance and internal controls to fully meet our statutory requirements under the Companies Act 2006, the UK Corporate Governance Code, the UKLA Listing Rules, Disclosure Guidance and Transparency Rules, and the Company's annual and continuing regulatory reporting. Additional challenge is provided by the Water Forum who challenge us to evidence how the voice of the customer has been considered in our decision making processes.



Our Board is supported by the Severn Trent Governance Framework, which is set out below. The Governance Framework comprises the Board, Executive Committee and their respective Committees.

In line with the 2016 UK Corporate Governance Code, the Board delegates certain roles and responsibilities to its various Committees. The Committees assist the Board by fulfilling their roles and responsibilities, focusing on their specific activities, reporting to the Board on decisions and actions taken, and making any necessary recommendations to the Board in line with its Terms of Reference. The Board regularly reviews the Terms of Reference of each Committee. The Governance Framework is also subject to periodic review to ensure that it remains appropriate.

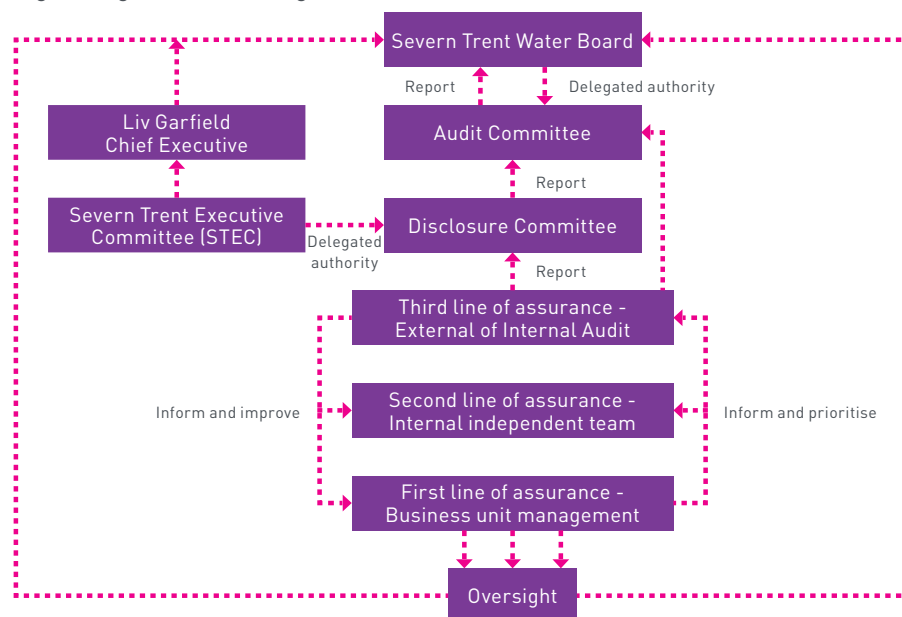
The Disclosure Committee oversees the Group's reporting obligations under the Companies Act 2006, the UK Corporate

Governance Code, the UKLA Listing, Rules, Disclosure Guidance and Transparency Rules and the Company's annual and continuing regulatory reporting requirements, considering the materiality, accuracy, reliability and timeliness of information disclosed and assessment of assurance received.

To support our Governance Framework, we also have a well-established, rigorous and robust assurance and performance reporting framework. Our assurance plan for the financial year, 2018/19, continued the high standard processes we developed and implemented in the previous years, for reporting our PCs in our ARA and APR.

Fig 4 on the following page shows how our assurance framework interacts with our governance arrangements to ensure that all levels of the business have oversight of our assurance processes.

Fig 4: Our governance arrangements



We operate a well-established, ERM system for identifying, assessing and managing our significant risks. This includes risks to our corporate objectives, core processes, key dependencies, stakeholder expectations and legal and regulatory obligations. A number of risk management systems feed our ERM process including our central repository for operational asset risks (STORM), water quality risks, and health and safety. As part of this we undertake regular horizon scanning both 'bottom-up', led by the business unit ERM champion, and 'top-down', by our Board and Executive Committee. Significant risks feed into our Company risk profile and are reported to our Executive Committee and to our Audit Committee and Board at least every half year.

3.4 Transparency and public accountability

As a public service we want to be transparent about how we balance the needs of our customers, our strategic plans as a business and a fair return for our investors. We believe we are prudent in how we manage financial risk and even-handed in the way we share the returns from our outperformance with customers and shareholders; we pay our taxes in full and on time; we pay dividends and Executive salaries that are reasonable and sustainable and linked to the delivery of outcomes to customers; we avoid complex offshore financial vehicles; we publicly report on our performance, and hold ourselves to account where we do not meet our commitments.

We evolve and update our reporting to make sure that it not only complies with our regulatory obligations but also responds to our customers' and stakeholders' feedback. We will simplify our customer version of our APR. This will be published in August to allow the inclusion of comparative performance against other companies to make our overall performance more transparent for our customers. We also publish our Company structure on our website, which shows how the companies including Severn Trent Water, Hafren Dyfrdwy and other associated companies are connected under the Severn Trent Group umbrella. In addition we already include details on Executive pay and how Severn Trent Plc pays dividend payments in the Severn Trent Plc ARA, and have improved the way we display this information in our APR.

4. Our internal assessment - licence to operate

As well as ensuring we account for our customers' views, we use the wealth of expertise within the business to assess all of our statutory and regulatory obligations relating to provision of water and waste water. We call this assessment 'licence to operate' which has been operating in Severn Trent for four years.

4.1 The process

Over the past four years we have continuously reviewed the process to improve it by using tools such as SharePoint to track the assessments and approvals from all levels of management. We monitor over 400 obligations. Licence to operate is a two stage process that operates through the mid and year end of the annual regulatory cycle. We describe the process in more detail in our Statement of risks, strengths and weaknesses and final Assurance plan, which can be found on our website.

4.2 Year end declarations

Prior to publication of our annual regulatory reporting we ask our responsible managers to declare whether they have been compliant or non-compliant with their obligations. If they have been non-compliant, we ask them to complete a 'departures' form, which details what issue has occurred during the reporting year and what action will be taken to prevent it in future.

All departures are then reviewed by the accountable senior manager and Director who will assess the level of materiality. Some departures, while representing an instance of non-compliance with process may not be material, for example, it may be within the stated confidence of the measure. All departure assessments are tracked on the departures form to ensure that we maintain a visible

audit trail of all areas of potential non-compliance.

Departures that are assessed to have a material impact are included in our Boards annual Risk and Compliance statement, which is published within our APR. This document is reviewed and scrutinised by the Severn Trent Disclosure Committee and Plc Audit Committee before it is endorsed by our Board prior to publication, ensuring that all levels of the business are made aware of any significant risks or issues.

4.3 2018/19 risk assessment outcome

In this year's assessment, the following areas were noted as either a high or medium-high risk, or our internal group compliance and assurance team has decided to include the area. This may include areas that may not necessarily score high on our internal risk assessment, but that we know are subject to, or could be subject to, regulatory change or emphasis.

- **Boundary realignment** - Following the creation of Hafren Dyfrdwy on 1 July 2018, our regulatory reporting has now been split according to the new licence lines. We have asked all lines of assurance (including third line) to consider how the boundary realignment has impacted regulatory reporting and whether performance has been allocated to the correct entity.
- **Cost allocation** - Cost allocation activities within our finance team are part of our established third line assurance annual processes, the following factors have meant that we wanted to place additional emphasis on this area for 2018/19:
 - o Boundary realignment and the creation of Hafren Dyfrdwy meaning that we wanted to ensure costs are allocated

correctly between our businesses; and

- o Ofwat's licence simplification consultation that embedded RAG 5.07 into our licence as of January 2019.

- **Drought plan** - The Water Act (2003) made it a statutory requirement for water companies to produce and maintain a drought plan. We update these plans every five years. Our Drought Plan sets out how we will manage our resources and supply system in dry years, to maintain our service to our customers. We published a draft drought plan in 2018 but following freeze-thaw of spring 2018 we will seek to incorporate learnings in our final publication.
- **Governance of regulatory and statutory duties** - As noted above, we want to ensure we can demonstrate we have good governance arrangements in place in order for us to meet our regulatory and statutory obligations. During PR19, Jacobs reviewed our governance arrangements and our processes for meeting these obligations to ensure these were appropriate.
- **K factor and ODI model** - Ofwat noted in its 'in period ODI draft determination' that it had found a small number of errors and inconsistencies in the spreadsheets we provided, which were used to calculate our reward/penalty for performance on our ODIs. We acknowledged that these errors had been missed by our two lines of assurance. This year this submission was superseded by the PR19 process, which had its own assurance processes as described in section 7.
- **New connections charging** - In 2017/18 Ofwat implemented a new set of charging rules relating to how we set charges for our Developer Services customers. As a result we implemented

new set of charging rules and the team set up three lines of assurance to check we were compliant with Ofwat's charging principles. This year we have worked hard to increase the robustness of first and second line assurance activities in areas recommended by our third line assurer last year.

- **Performance commitments** - in recognition of the potential impact our PCs have on our customers, the environment and market confidence, our customer ODIs continue to feature in our assurance plans as part of the APR. Customer ODIs remain a high priority for customers and our stakeholders because:
 - o our PCs reflect the areas of service that our customers have told us are most important to them - we have an obligation to accurately report if we are meeting our commitments;
 - o our investors can make decisions as to whether to invest in our company based on the performance data we provide - we have a fiduciary duty to accurately report how we are performing; and
 - o we are one of four companies that are able to apply some of the financial incentives during the 2015-20 period (before our full plan is completed) - if we are to make decisions that impact our customers' bills, we must have confidence that it is on the basis of high quality information.
- **PR19 future reporting** - As part of our PR19 business plan we proposed a suite of PCs for the next five year period (2020-2025), a number of which require new reporting processes to be

developed. As such, we want to ensure we can report our data accurately before the next AMP starts. Last year we asked our regulatory technical auditor to review our plans in advance to check that we had suitable action plans in place to address any areas where we would potentially be unable to report the new measures. This year we're using the same process that we use for our PC data in 'shadow' i.e. half year and full year audits to ensure we get a snapshot of risk areas prior to year-end.

- **Water Resource Management Plan** - Our draft Water Resource Management Plan was published in January 2018 and was open to consultation with all our customers and other stakeholders. This year we will be publishing the final plan that requires a signed Board Assurance statement to be published alongside it. Given the complexity and strategic importance of managing our water resources, we wanted to make sure that our final publication was subject to third line review.
- **Water quality obligations** - Due to existing processes that are in place, we believe we are compliant with our obligations under the Water Quality (Water Supply) Regulations and the Water Industry Act. All of our managers are competency checked and trained whether they are new or existing in role as part of a three year programme, however, due to staff changes in the teams that carry out these duties we want to ensure that all of our managers have an up to date understanding of what

their responsibilities are. Our regulatory performance team are conducting an internal review to ensure an appropriate RACI is in place.

- **Obligations in the non-household retail market** - While we are continuing to evolve our business procedures to ensure we can deal with all market transactions in a timely manner, we recognise that some of our processes in the relatively new retail market are comparatively immature. We closely monitor our Market Performance Standards and Operational Performance Standards to ensure we continue on an improving trajectory.

We used these areas as part of our customer engagement described in section 5 and published them as part of our November 2018 consultation document to understand whether our customers and stakeholders believed were targeting the right areas. The outcome of assurance for these areas are covered in sections 6 and 7.

5. Customer and stakeholder engagement

To understand which areas matter most to our customers and stakeholders, we used our regular engagement methods and also bespoke research specifically designed to inform this plan. We also put this plan out for consultation in November 2018.

5.1 Customer engagement

Prior to publishing our draft Assurance plan in November we undertook customer focus groups to understand what areas mattered most to them by using the results from our internal assessment described in section 4 above. Customers largely agreed with our internal assessment and helped us to prioritise in particular our charges and PCs as areas of keen interest to them.

Further details on the engagement we undertook can be found in our final risk and assurance plan on our website.

5.2 Stakeholder engagement

As well as listening to our customers, we wanted to take on board feedback from other stakeholders.

5.2.1 Ofwat 2018 CMF Assessment

In their most recent assessment, Ofwat have continued to assess us as requiring 'targeted' assurance with two areas (outcomes and cost assessment) noted as having 'minor concerns'. We will continue to work with our customers and stakeholders to address the themes noted in Ofwat's assessment:

1. Data quality. Ofwat noted that our cost assessment table 4L was missing one line of data and that a number of queries had to be raised against our cost assessment tables that on occasion meant data had to be restated.

2. Data commentary and explanation of variance. Ofwat noted that sometimes we failed to adequately explain variances in our data or provided no commentary resulting in Ofwat requesting clarification from us through the formal query process i.e. we did not explain the adjustment to the water supply interruptions underperformance payment in our 'APR 2017/18' and 'APR 2017/18 - a summary for our customers' published in July 2018.

3. Meeting the requirements of IN18/07. Last year Ofwat asked all companies to provide a performance statement, setting out how the company is delivering for the stakeholders that rely on its services and how its aspirations have been shaped in the APR. While we did publish this statement within our customer summary on our website, we acknowledge that we did not include it within the APR itself. We have included this statement in our APR on page 8.

Our goal remains to achieve 'self-assured' status.

5.2.2 Water Forum

Our Customer Challenge Group, also known as the Water Forum, will be continuing to represent the voice of our customers following extensive engagement during the development of our business plan. Prior to publication of our draft Assurance plan, we gave a brief overview of the areas of risk we were likely to include in this document to gain their insight into whether they agreed with our initial proposals and again prior to publication of our final plan. Their feedback included:

- **Expanding the scope of licence to operate to include further legislation.** In response, this year we have made several legislation additions to licence to operate, which has taken us to over 400 obligations covered by the process (previously 350). We will continue to review whether we have included all material legislation in our licence to operate process and update it as needed.
- **Including freeze-thaw event in our Assurance plan.** In response we added this as an area that would be covered by assurance this year.

Prior to the publication of our final APR we shared our performance with the Water Forum for review and comment.

5.2.3 Other stakeholders

Following publication of the consultation, we sent out notices to over 100 stakeholders such as the Federation of Small Businesses, CCWater England, National Trust, local environmental groups and local councils to ask them for their views. This year we are pleased to have received seven responses in total, as this is the best response we have achieved since we began publishing our draft assurance plans. The themes of the responses we received and our response to these are below:

- **Ensuring wider customer engagement** - We are committed to engaging with our customers throughout the AMP using a range of survey types through our existing tools; Pipe Up (Qualtrics SMS Surveys), Qualtrics Research Campaign Surveys (SMS and Email based), Qualaroo

(website surveys), TapChat and our quarterly customer tracker. We will also continue to use customer focus groups and other bespoke survey methods on an ad-hoc basis to consult on specific issues where required. Our future goal is to survey through the customer's channel of choice to help us achieve the best response rate from a broad range of people.

- **New connections charging rules**

- One respondent expressed that they would be concerned if the new charging rules were a constraint on delivery of necessary infrastructure. We believe the new charging rules help developers by giving them clear and transparent view of what a new connection will cost them either through self-lay or via ourselves. As part of the charging rules we are required to demonstrate that we have engaged with our developer customers of different types to brief them on any changes we plan for the new charging year. This is reviewed as part of our assurance processes.

- **Asset risks** - One respondent noted that we had not included a number of asset risks such as aging infrastructure or a lack of skilled staff going forward. While this plan is more concerned with risks to published information (as per the scope of Ofwat's CMF), we have contacted the respondent in question to address their specific concerns.

- **Other** - Three other participants thanked us for the opportunity to respond but while they had no specific concerns regarding this plan, they wanted to be kept informed of future consultations and publications such as the final WRMP, which we have fed back to our strategy and regulation team.

6. Assurance of our APR

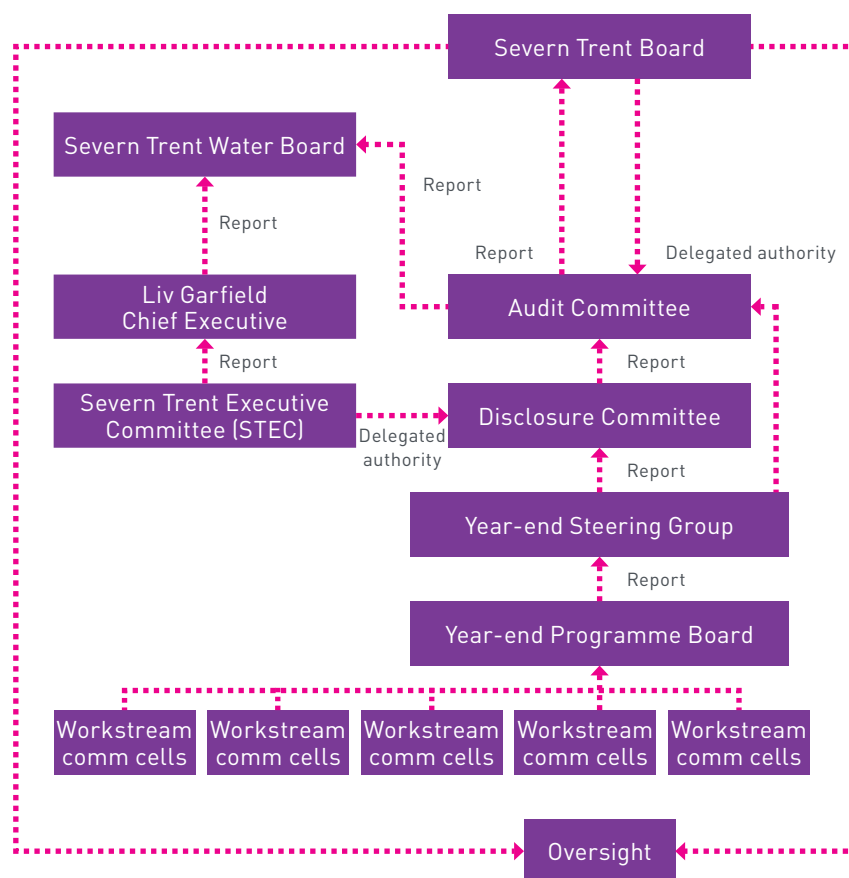
In this section we explain how the data included in our APR has been assured, and the outcome of that assurance.

6.1 Governance

We have a well-established assurance and reporting framework, which incorporates Ofwat's APR requirements and the RAGs. Across the business we assign accountable and responsible managers for all reporting lines in our APR. These managers review and approve the process documentation and data as part of our first line assurance and prior to third line assurance. Following third line audits, all individuals within the approval process sign off the data and commentary, culminating in the relevant Director approval of both the data and commentary. Subsequently the APR is reviewed by the Severn Trent Plc Disclosure Committee who are accountable for ensuring that all year end publications comply with applicable disclosure requirements. The Audit Committee who has delegated authority from our Board then reviews to ensure the adequacy of the year end assurance process, prior to our Board reviewing and approving the final submission.

In addition to these existing governance arrangements, we enhanced the process this year by creating a year end programme steering group and programme board, which was incorporated into our governance framework as set out in Fig 5 below. This gave our Board greater oversight of year end reporting with regular updates noting progress against key milestones and the ability to escalate key risks and issues as required.

Fig 5. Our year end governance arrangements



6.2 Assurance

The APR comprises the four sections outlined by Ofwat in 'RAG 4.08 - Guideline for the table definitions in the Annual Performance Report':

- 1.Regulatory financial reporting.
- 2.Price review and other segmental reporting
- 3.Performance summary.
- 4.Additional regulatory information (includes cost assessment information).

We utilised our existing assurance framework as detailed in section 3.1 for the APR. This is a risk based approach whereby we target our most critical areas with our three lines of assurance model. We used a number of third line assurance providers aligned with their areas of expertise. This is set out in the tables on the next page.

Fig 6: Sections 1-3 assurance

Assurer	APR Section	Methodology and Process	Data
Deloitte	Section 1	✓	✓
	Section 2	✗	✓
Jacobs	Section 1 (Financial flows)	✓	✗
	Section 2	✓	✗
	Section 3	✓	✓
Black & Veatch	Section 3 (Chester Only)	✓	✓

Fig 7. Section 4 assurance

Table	Methodology and Process	Data
4A	Jacobs	Jacobs
4B	Internal Audit	Internal Audit
4C	Internal Audit	Internal Audit
4D	Internal Audit (upstream services cost driver calculations)	Internal Audit
4D	Jacobs (Volumetric information submission)	Jacobs
4E	Internal Audit	Internal Audit
4F	Internal Audit	Internal Audit
4G	Internal Audit	Internal Audit
4H	Internal Audit	Internal Audit
4I	Internal Audit	Internal Audit
4J	Internal Audit	Internal Audit
4K	Internal Audit	Internal Audit
4L	Internal Audit	Internal Audit
4M	Internal Audit	Internal Audit
4N	Internal Audit	Internal Audit
4O	Jacobs (Non-financial data)	Jacobs
4O	Internal Audit	Internal Audit
4P	Jacobs	Jacobs
4Q	Jacobs	Jacobs
4R	Jacobs	Jacobs
4S	Jacobs	Jacobs
4T	Jacobs	Jacobs
4U	Jacobs	Jacobs
4V	Internal Audit	Internal Audit
4W	Internal Audit	Internal Audit

We summarise the assurance undertaken and the outcome below by assurance providers. We have also included letters of assurance from our technical assurers, Jacobs and Black & Veatch on page 22 and page 23 of the APR respectively. Deloitte provide an audit opinion on the Regulatory Accounting Statements, which is set out in full on page 59.

6.2.1 Deloitte

Deloitte provided assurance procedures over sections 1 and 2 of the APR. These sections, which provide a baseline level of historical cost financial information and are aligned to our price controls (and associated regulatory performance commitments and incentives) set out in Ofwat's 2014 Final Determination.

Deloitte audits the following tables within section 1 of the APR:

- Regulatory financial reporting tables comprising the income statement (table 1A).
- Statement of comprehensive income (table 1B).
- Statement of financial position (table 1C).
- Statement of cash flows (table 1D).
- Net debt analysis (table 1E).

The following tables in section 2 are also audited by Deloitte:

- Regulatory price review and other segmental reporting tables comprising the segmental income statement (table 2A).
- Totex analysis for wholesale water and waste water (table 2B).
- Operating cost analysis for retail (table 2C).
- Historical cost analysis of fixed assets for wholesale and retail (table 2D).
- Analysis of capital contributions and land sales for wholesale (table 2E).
- Household water revenues by customer type (table 2F).
- Non-household water revenues by customer type (table 2G).
- Non-household waste water revenues by customer type (table 2H).
- Revenue analysis & wholesale control reconciliation (table 2I).
- Infrastructure network reinforcement costs (table 2J).
- Infrastructure charges

reconciliation (table 2K) and the related notes.

Deloitte refer to these tables as the "Regulatory Accounting Statements" and their audit opinion is included on pages 59 to 61.

Table 1F is not subject to audit procedures. As agreed with Ofwat, Deloitte have performed agreed upon procedures in relation to this table.

Outcome of assurance

Deloitte's audit opinion confirms that:

- Proper accounting records have been kept by the appointee as required by licence condition F.
- the Regulatory Accounting Statements are in agreement with the Appointee's accounting records and returns retained for the purpose of preparing the Annual Performance Report;
- the Regulatory Accounting Statements have been properly prepared in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA (RAG 1.08, RAG 2.07, RAG 3.11, RAG 4.08 and RAG 5.07) and the accounting policies (including the accounting separation methodology).

6.2.2 Jacobs

Scope

We asked Jacobs to provide technical assurance on the following elements of APR reporting:

- Performance against legacy STW PCs including associated customer ODIs and key supporting processes and data for properties and volumes and Customer Operations Service Centre regulatory inputs.
- Non-financial data included in the APR section 4 tables.
- Common PC reporting (PR19 ODIs).
- RoRE and financial flows.

- Cost allocation between appointee associates STW and HD, between STW price controls and to third parties.

Process

Jacobs undertake assurance using a staged approach. Stages one and two focus on documentation and process. During stage one, Jacobs reviewed the process description templates which are followed in order to report against PCs. Stage two included both desktop reviews and face-to-face interviews. These reviews ensure that:

- Processes are in place to produce data that are consistent with the RAGs, PC definition or non-financial data definition.
- Improvements and changes in processes from previous assurance rounds are clearly stated.
- Accountability and responsibility of each stage of the process is clear with dependencies, assumptions, risks and mitigations identified.
- There is appropriate quality assurance with checks and controls identified.

Stage three focuses on data produced and associated commentaries which explain our performance in more detail. Audits are carried out in person with the responsible data owners. These audits ensure that:

- Data produced are consistent with the PDT and any deviations from this are identified and evidenced.
- Any rewards/penalties or further data points are calculated in line with Final Determination requirements. This focusses on the mechanistic calculation to give the gross reward/penalty position.
- Commentaries accurately reflect the data and performance within the year.

The assurance undertaken by Jacobs this year complements our overall assurance framework and reflects our view of the level of risk, which is in part informed by previous assurance findings. Application of each stage of the Jacobs assurance approach for 2018/19 was guided by the level of risk.

Outcome of Jacobs' assurance **APR Section 2 – Cost allocation**

As part of the industry's annual performance reporting, Ofwat requires companies to publish regulatory accounts that, among other things, set out financial information:

- on the allocation of costs by price control and subsections of the value chain;
- on non-appointed activity; and
- on transactions between associate companies.

In reporting on the above, we are required to comply with Ofwat's RAGs - in particular 'RAG 2.07 - Guideline for classification of costs across the price controls' and 'RAG 5.07 - Guideline for transfer pricing in the water and sewerage sectors'.

Over and above the RAGs, companies' licences also place an obligation on them to ensure that every transaction between the appointee and any associated company is at arm's length, so that neither gives to nor receives from the other any cross subsidy (Condition F). This also applies to appointed and non-appointed activity within the appointee.

Following the acquisition of Dee Valley Water, and the implementation of the subsequent NAV application to align STW and HD to the geographical border between England and Wales, Ofwat still expects transactions between STW and HD to be at arm's length.

Ahead of our year-end financial reporting, we asked Jacobs to review a sample of our cost

allocation processes. We selected the sample based on the risk associated with them. In total Jacobs reviewed 36 PDTs and processes, which covered:

- Allocations across price controls within STW and HD.
- Allocations between appointed and non-appointed activity within STW and HD.
- Allocations and recharges of costs between the associate companies STW and HD.

Consistent with previous work in this area, Jacobs reviewed the documentation and processes with a focus on the consistency of the allocation approach with the RAGs. To that end, Jacobs sought to understand:

- The areas/activities that were being provided.
- The costs associated with that activity - which for the PDTs we reviewed were operating costs.
- How those costs are recharged, allocated and why.
- How our approach is compliant with RAGs.

Jacobs acknowledged that many improvements had been made from the prior year and that we are continuing to improve our processes.

APR Section 3 – Performance Commitments

Half year

This year we asked Jacobs to focus the above staged approach on targeting PCs that we considered as high risk. The desk top reviews focused on whether actions from last year's assurance had been addressed. Process and data meetings were held where:

- We had made significant changes to our process since last year and/or the PC did not meet our target confidence grade.
- There is potential to impact the customers' bill due to earning

a significant reward or incur significant penalties.

- We may be underperforming and/or lack confidence in the data quality feeding into the AMP7 PC's.

During their half year review Jacobs identified three areas that potentially had material risks:

- **SIM** - Following the integration of Hafren Dyfrdwy into Severn Trent's systems Jacobs noted some inconsistencies with regional allocation tags for unwanted calls and written complaints i.e. some contacts were appearing as 'unknown' in the reports and could not be allocated to a geographical area.
- **Properties and volumes** - Jacobs identified that changes to reports to make them more robust meant the team was unable to simply produce Q1 data as the new reports took snapshots of a live system. Additionally Jacobs asked us to explain how we had accounted for changes in market eligibility following our NAV as there were some inconsistencies in the business and residential figures.
- **Leakage** - During their review, Jacobs noted that at half year there was a risk of our water balance gap being greater than five percent, which could mean our current reporting method is not the most appropriate.

We addressed these risks following half year assurance and are pleased to say that Jacobs agreed that these had been resolved during our year end assurance.

Full year

Jacobs reviewed the reported full year performance for the vast majority of the PCs set out in our Final Determination and the processes that were used to produce the figures. In line with our risk based assurance framework, Jacobs did not review the PC data or process where it is deemed low risk, for example

'Improved understanding of our services through education', which has no financial reward or penalty associated and has had no methodology changes from the prior year.

Jacobs' scope of assurance work included checking the following:

- The processes used are robust, enabling risks to be identified, managed and reviewed.
- The processes are sufficient, demonstrating an internal system of control and are consistent with the requirements of the regulatory obligations.
- The processes are managed with a system of governance that demonstrates a sufficient system of internal control.
- Data is competently sourced, processed and reported and fit for purpose.

Jacobs noted *'Overall, for the legacy STW PCs and non-financial APR section 4 tables and lines we reviewed we observed robust processes and reporting procedures. For the 2018-19 data we reviewed we note there are no remaining material issues...'*

We are pleased that our improvements made in the year have been recognised and Jacobs were satisfied with our reporting of the PCs.

APR Section 3 – Leakage

In 2018/19 we undertook our established assurance process with included process and data audits on our PCs at half year and again at year end with Jacobs, our assurance partners. At half year, Jacobs raised a potential risk to our year end position:

'During our half year exercise we observed that there is a potential material risk for 2018-19 full year reporting as your teams half year analysis indicates the [water balance] gap is continuing to grow...'

Although the Ofwat methodology changes planned for AMP7 would close the gap, we were aware that it was increasing in AMP6. As result of this risk, our teams undertook a number of improvement actions to understand why our water balance gap was growing:

- We reviewed all elements of our leakage calculation and ensured that the data is as accurate as possible. The rigour around understanding and improving our data accuracy helped us to know where leaks were taking place by eliminating areas where we were simply unable to account for water use. Through this we also improved our understanding of the additional water consumption observed during the hot weather period.
- Using our small area monitors, commercial consumption monitors and half yearly consumer meter readings we gained greater confidence in our ability to differentiate between true increases in water consumption and leakage. Based on the success this work delivered, we plan to continue this work throughout 2019/20.

As part of the work to better understand our data all components of the water balance were reviewed and Jacobs were engaged in November to provide additional assurance and challenge, and also to undertake regular interim audits of components and overall approach prior to year end. Outputs of the interim audits were fed back to the head of leakage, head of group compliance and assurance and Director of strategy and regulation.

The water balance investigation identified areas to reduce the water balance gap which consisted of data corrections, data improvements and methodology changes which were reviewed and agreed with Jacobs. The data changes have been included in the APR19 leakage reporting. The methodology changes, along with the previously

identified consistency changes, have been included in our AMP7 shadow reporting. As a result of our work, Jacobs were satisfied that we had addressed the material risk noted at half year. We are continuing to embed the changes in to our documented processes for the coming year.

APR Section 3 – Common PCs

Ofwat has been working to develop consistent guidance for the 14 common PCs that it intends all companies to report on in the next AMP. While we are not required to formally report on these measures until 2020/21, Ofwat has included these measures in Table 3S of the APR for 2018/19. As a result, we asked Jacobs to use its three staged assurance approach in line with our other PCs by reviewing our processes, methodology and data.

Overall, Jacobs noted that for the majority of measures we were compliant with the reporting requirements however noted one material issue relating to unplanned outages: *'For the APR common PCs we reviewed, your teams have plans in place to be materially compliant for 2019-20 reporting where you are not already... For the common PCs we reviewed, we note we identified material issues with your 2018-19 reporting for unplanned outages as your systems and processes meant you could not report some of the information Ofwat is asking for this year...'*

While Jacobs acknowledged that our team had made progress from the year prior we have again included 'unplanned outages' within our Compliance statement for 2018/19 as a result of their findings. Additionally, Jacobs noted that improvements are required against certain components in our leakage and per capita consumption measures to ensure we are compliant for 2020. Action plans are in place to ensure that all PR19 PCs including the common ones are fully compliant and ready for reporting in 2020.

APR Section 4 – non financial APR

Jacobs noted *'For the non-financial APR section 4 lines we reviewed we note that whilst there are no outstanding issues from our data audits that should have a material impact on your overall APR reporting for 2018-19, there are some lines where you will be monitoring reporting risk more closely, or implementing improvements, due to issues we identified during our work. We also recommended you carry out a review of how data is being aggregated for the purposes of SVE APR19 reporting.'*

For all areas of risk or recommendations noted by Jacobs, we will review these and ensure we address any concerns next year.

6.2.3 Black & Veatch

Scope

Black & Veatch Ltd provided technical assurance covering only the Chester area of the Company after the boundary alignment (i.e. 1 July 2018 onwards) on performance reported against selected annual PCs and against Ofwat common measures for leakage, interruptions to supply and per capita consumption.

Process

Black & Veatch conducted a one stage audit including desktop review and face-to-face interviews, which reviewed both process and data. As part of the process audit, Black & Veatch reviewed the PDTs which are followed in order to report against PCs. These reviews ensure that:

- Processes are in place to produce data that are consistent with the PC definition.

- Improvements and changes in processes from previous assurance rounds are clearly stated.
- Accountability and responsibility of each stage of the process is clear, with dependencies, assumptions, risks and mitigations identified.
- There is appropriate quality assurance with checks and controls identified.

The data audit focused on the data produced and associated commentaries which explain our performance in more detail. Audits are carried out in person with the responsible data owners. These audits ensure that:

- Data is produced in a manner consistent with the PDT and any deviations from this are identified and evidenced.
- Commentaries accurately reflect the data and performance within the year.

Outcome

Overall, Black & Veatch noted: *'From our assurance work we are satisfied that for the topics we covered, the information reported in and supporting the APR19 was compiled using appropriate data and methodologies and provides a realistic representation of actual company performance. We identified no material weaknesses or deviations from established procedure.'*

In our opinion, the company's framework of three lines of assurance provides a good level of confidence that assurance is robust and governance in place. The reporting process and the information for reporting are scrutinized and approved by the Audit Committee and performance is reviewed by the Board.'

Black & Veatch's summary of assurance is included on page 23 of the APR.

6.2.4 Internal Audit

Process

As part of its assurance, Internal Audit performed the following checks:

- Confirmed that the processes followed appeared appropriate to produce the data required for the submission.
- Traced historical data used in the tables back to source or previous published submission.
- Checked that data was produced in line with the methodology documents and RAG4 requirements.
- Data from the working files was agreed to the APR data tables to be submitted.
- A sample of business cases were reviewed to check the correct allocation of costs.

Outcome

Internal Audit confirmed that no material issues had been found and that *'all additional supporting evidence and answers to any queries raised were provided.'*

7. Outcome of assurance in other areas

In February 2019, we republished our 'Statement of risks, strengths and weaknesses' that we had published in November, alongside our 'final Assurance plan'. This document set out our key risks and included details of how we would address these with assurance this year in our final Assurance plan. The table below details the outcome of that assurance. We believe that this table represents the majority of our high/medium high risks and stakeholder prioritised activity within the company, however as a part of our risk and compliance framework we are always challenging our teams to ensure the data that they produce and publish is of a sufficiently high quality. We believe that good assurance is an integral part of the way we work and that checks are undertaken in both a formal and informal manner as part of our business as usual activity. We also complete numerous self-assessments of compliance at first and second line across the business.

Risk Area	Why?	Summary of assurance undertaken
Annual Performance Report (APR) including our PCs	<p>This report is the principal way that we will document our annual performance and hold ourselves publicly to account. The report is divided into the following sections:</p> <p>Section 1: Regulatory financial reporting</p> <p>Section 2: Price review & other segmental reporting</p> <p>Section 3: Performance summary</p> <p>Section 4: Additional regulatory information</p> <p>The report will include inputs from other areas covered by this Assurance plan (e.g. financial accounts) and require some forecasts of performance. It is important that we present information in a fair and balanced way that is accessible to our broad range of customers and stakeholders.</p> <p>In addition some of our PCs have a financial reward or penalty associated so customer bills will be directly affected by our performance.</p>	As described in section 6 above.
Annual Report and Accounts (ARA)	We have a statutory obligation to ensure that our financial accounts are prepared in accordance with the relevant financial reporting framework and give a true and fair view of the assets, liabilities, financial position and profit or loss of the company.	Our ARA has been subject to our established assurance and governance framework with the majority of data being subject to three lines of assurance. Deloitte have provided our financial audit opinion in line with statutory and regulatory guidelines. Their opinion is included in both our ARA. Additionally any data that is included in both the APR and ARA is subject to the assurance as described in section 6. Our Internal Audit team also conducted some cross checks of the data used in the publication to ensure consistency.

Risk Area	Why?	Summary of assurance undertaken
Annual report to CCWater	CCWater are the statutory customer representative body for our industry and a member of our Water Forum. We want to ensure the information we provide on a quarterly and annual basis is accurate. The majority of this data is directly from our PCs reporting.	Each quarterly submission is subject to internal first and second line assurance. Where the data is used for a PC the data is subject to our assurance approach as described in section 6 above.
Freeze-thaw action plan	In March 2018 we experienced challenging weather conditions across our network. We acknowledged that our response could have been better and following receipt of a letter from Ofwat, we put together a formal action plan for improvement.	Following the freeze-thaw event we conducted an internal review to understand the lessons learned and what improvement actions could be put in place to prevent the same issues in future. This exercise formed the basis of our formal action plan for improvement to Ofwat, which was subject to external assurance with Jacobs and published on our website. Since the publication of the plan, our Internal Audit team have continued to track the actions and report to STEC on a monthly basis to ensure our planned timeline is on track for delivery. Currently we are reporting all actions as on track.
Boundary realignment	Following the creation of Hafren Dyfrdwy on 1 July 2018, our regulatory reporting has now been split according to the new boundaries in our respective licences. We have asked all lines of assurance to consider how the boundary realignment has impacted regulatory reporting and whether performance has been allocated to the correct entity.	Having completed the majority of our system integration programme at the beginning of the year, the focus for assurance this year was ensuring that our regulatory reporting reflected the changes. This led to us asking all areas to be able to report on a '4-box' model basis so that the four geographical areas within both companies could be identified i.e. STW England, Wrexham, Powys and Chester. As part of the third line assurance, we asked Jacobs and Black & Veatch respectively to check we could report performance on the basis agreed in Ofwat's final NAV determination. Thanks to the significant work undertaken by our operational and financial reporting teams, no material issues relating to boundary realignment have been identified.

Risk Area	Why?	Summary of assurance undertaken
Charges including access prices and non-primary	<p>We want to make sure that what we charge our customers is correct. We have established assurance processes to ensure we are within our revenue cap and compliant with Ofwat's charging rules. The charges process is split into two parts:</p> <p>Draft - Since the non-household retail market opened, we have been required to publish draft wholesale charges in October to give retailers early sight of charges for the next financial year. Access prices are also reviewed at this stage.</p> <p>Final - In January, companies are required to publish all of their proposed charges for the next financial year i.e. non-household and household, retail and wholesale and non-primary charges.</p>	<p>Our Scheme of charges reporting is subject to three lines of assurance with a number of providers.</p> <ul style="list-style-type: none"> • Numeritas who reviewed our financial model • Jacobs who reviewed our methodology, processes and data outputs • Internal Audit who conducted final consistency checks on the model outputs, published documents and tracked noted assurance actions through to completion. <p>The outcome of their assurance was reported to the Audit Committee prior to approval. No material issues were outstanding and our final Scheme of charges for 2018/19 was approved by our Board ahead of publication in line with our established governance. A Board Assurance statement was published alongside our charges.</p>
Cost allocation activities	<p>Following the creation of Hafren Dyfrdwy we wanted to ensure that across the business we allocate costs correctly so that Severn Trent customers in England only pay for the services they receive, and vice versa for customers of Hafren Dyfrdwy in Wales.</p>	<p>In addition to the established activities described above (e.g. licence to operate and ERM) and in order to comply with the requirements of RAG 5.07, during 2018/19 we have added further controls and governance by establishing a Steering Committee responsible for overseeing RAG5 compliance and reporting directly to the Disclosure Committee. We have also established a RAG5 working group reporting directly to the Steering Committee, ensuring that any improvement actions are undertaken at an operational level.</p>
Drought plan	<p>The Water Act (2003) made it a statutory requirement for water companies to produce and maintain a drought plan. We update these plans every five years. Our Drought plan sets out how we will manage our resources and supply system in dry years, to maintain our service to our customers.</p>	<p>For our draft Drought plan we performed second line assurance including technical assurance, with no material issues identified. For the Statement of response in September three lines of assurance were undertaken with Jacobs undertaking third line for any material changes or responses. No material issues were identified by Jacobs. We plan to carry out three lines of assurance on a risk based approach for the final plan.</p>

Risk Area	Why?	Summary of assurance undertaken
Governance of regulatory and statutory duties	As noted above, we want to ensure we can demonstrate we have good governance arrangements in place in order for us meet our regulatory and statutory obligations. During PR19, Jacobs reviewed our governance arrangements and our processes for meeting these obligations to ensure these were appropriate.	Our licence to operate process was subject to review through our established governance. This year we also added an extra step whereby we conducted face to face sign off sessions with members of our Executive to highlight departures and areas of risk. This led to an increased level of engagement and challenge in the licence to operate process and acted as an additional level of assurance. In one instance a member of our Executive team requested that his managers re-visit their assessments before his sign off.
K factor and ODI model	We provide a set of data spreadsheets to Ofwat on an annual basis so that it can calculate our in year ODI reward/penalty. Following Ofwat's review, we acknowledged that a small number of errors were made in our submission and had been missed by our second line assurance process.	This year this submission is superseded by the PR19 process, therefore please refer to 'PR19 - Future reporting and Initial Assessment of Plan (IAP)', later in this table.
Market information (bioresources and water resources)	To help these markets grow successfully, it is important that customers and potential market participants can trust our costs are accurate in these areas for activities such as demand management, treatment, transport and other 'search costs'. We will support these new market areas and ensure our data is accurate and has had a third line review before publication.	For our bioresources submission, we used our established risk based assurance approach and deployed all three lines of assurance prior to submission with Internal Audit reviewing at third line. No material issues were found. For our water resources submission, much of the process, data and assurance is derived from the WRMP. As the water resources submission publication deadline is set to one month after publication of a company's final WRMP we will conclude our assurance at that time. We will ensure a consistency check is performed between the two publications.

Risk Area	Why?	Summary of assurance undertaken
Market Performance Standards (MPS) and Operational Performance Standards (OPS)	On a monthly basis, we are required to submit a number of key performance indicators to the market operator, MOSL, which then publishes the information on its website. This information is used by retailers, Ofwat and MOSL to ensure that wholesalers are delivering a competitive and fair service to all customers in the market. Failure to meet OPS and MPS SLAs will also result in a financial penalty.	OPS and MPS performance is reviewed throughout the month by the responsible managers and monthly with the accountable senior manager. Assurance has been completed on all our OPS submissions with third line assurance provided by Internal Audit periodically throughout the year. In line with our established governance OPS and MPS performance is reviewed quarterly by Plc Disclosure Committee with any additional actions for improvement noted and reported at the following meeting. We have kept MOSL informed of any issues and actions taken to rectify them.
New connections charging	The new connections charging rules were updated significantly last year and we wanted to ensure the process aligns to our company wide Scheme of charges process, which is already subject to third line assurance.	Our new connections charging arrangement for 2018/19 was approved by our Board ahead of publication in line with our established governance. Independent external assurance was undertaken by Jacobs, the outcome of which was reported to the Audit Committee prior to approval. No material issues were outstanding in relation to the data itself although Jacobs did recommend a number of improvements to our process documentation, which will be implemented prior to the 2019/20 submission. A Board Assurance statement was published with our charges.

Risk Area	Why?	Summary of assurance undertaken
PR19 - Future reporting and Initial Assessment of Plan (IAP)	<p>We want to ensure that in advance of the next reporting period (2020-25) we have adequate processes in place to report our new measures especially for our PCs that have a financial reward associated with them.</p> <p>Additionally, following Ofwat's IAP assessment where we were awarded 'fast track' status, we were required to respond to number of queries and amend associated data tables.</p>	<p>As part of the PR19 process this year we have made several submissions to Ofwat</p> <ul style="list-style-type: none"> • PR19 submission - our submission to Ofwat was subject to an extensive programme of assurance which followed our established risk based approach and governance procedures. The assurance was specifically developed for PR19 with substantial third line assurance being undertaken by a number of assurance providers and industry experts. A statement of the assurance undertaken was submitted alongside our plan which can be found on our website. • PR19 queries - throughout the year we have received requests for clarification from Ofwat on our PR19 submission. Typically these have a two day turnaround and as such we aim to produce high quality responses within the timescale provided. Responses are produced by the responsible operational team and then reviewed by the Group compliance and assurance team as a second line check. Responses are always approved by a senior manager prior to being sent to Ofwat. • Fast track response and IAP actions - Due to the timing of the fast track response (two weeks deadline) we undertook two lines of assurance with strong governance oversight. For our IAP actions, we applied a risk based third line assurance approach including third line review of our unplanned outages data. As described in section 6 above, unplanned outages was subject to three lines of assurance with Jacobs reviewing at third line. • PR14 reconciliation - Any data derived from APR19 was subject to assurance as described in section 6 above. Additionally our Internal Audit team reviewed our financial models and data.

Risk Area	Why?	Summary of assurance undertaken
Water quality obligations	Our internal risk assessment noted this as potentially medium high risk due to recent staff changes within the teams involved. We believe we are compliant with our obligations due to existing processes but we want to refresh our managers on their obligations.	Annual reporting of our water quality measures with ODIs are also subject to three lines of assurance as described in section 6 above. In addition, since publication of our final Assurance plan, we have reviewed our licence to operate assessments of water quality obligations and reduced the risk associated by completing or clarifying RACIs across the organisation.
Water resource management plan	This document sets out how we plan to meet our customers' need for clean water both now and in the future, taking into account the changing impacts of climate change and population growth. The EA has set out the approach it expects companies to follow in completing the submission and has outlined specific requirements for assurance, including a signed Board Assurance statement.	External third line assurance of data, methodologies and the presentation of information was provided by Jacobs. Jacobs found no material issues in the plan, however it made recommendations which we have implemented. Our WRMP was approved by our Board in line with our established governance and the assurance reviewed by the Audit Committee. Our Board provided a statement of assurance with the publication of our draft WRMP.

8. Our approach to assurance from 2020 onwards

Our approach to assurance is constantly evolving and as we look to the next AMP, we want to develop our assurance processes further and innovate new methods of working to help us achieve our aim of being the most trusted water company.

8.1 Board governance and oversight

Our Board will continue to remain fully engaged in monitoring our performance and providing challenge where required through our established governance arrangements in the next AMP. In particular, performance against our new PR19 measures will be monitored by the Executive Committee and Board, and through the Severn Trent Plc Disclosure Committee and Audit Committee at least during mid-year and year end points in the reporting cycle. Our assurance plans will continue to be reviewed by the Severn Trent Plc Disclosure Committee and Audit Committee for their input and challenge.

8.2 Our risk based approach to assurance

We will continue to use our risk based three lines of assurance approach to target the areas that matter most to our customers and to respond to changing regulatory conditions. To ensure we spot potential issues early, our future assurance plans will continue to highlight new reporting requirements or new legislation as an area of focus. For example, we expect all new PR19 PCs to go through both mid-year and year end audits in the first year to enable us to adequately assess areas for improvement and ensure we've the best data available to report our performance.

As part of our established processes, our new PCs will also be added to our licence to operate framework with accountable managers assigned to ensure strong business ownership and to capture any risk of non-compliance with the measures. Any business critical risks associated with our PCs will also be captured through our established ERM system.

8.3 A transparent approach to historic restatement

We are committed to continuously improving our data and information to support our regulatory returns and other information we publish in two ways:

- Striving to improve our current reporting methods - we review our internal processes and look externally for improved ways of reporting especially in areas where our information gathering process may still be maturing. For example, we acknowledged in our Risk and compliance statement this year that we were unable to report unplanned outages in line with the PR19 convergence measure guidance but we've made good progress towards our action plan as acknowledged by Jacobs in their assurance report.
- Correcting errors in a transparent manner and protecting our customers - while we believe our assurance framework reduces the risk of errors from occurring in the first place, we recognise that as we review our historical performance retrospectively we may discover examples where we didn't get things right first time. In these small number of instances, we are committed to issuing clear and public corrections in the regulatory publications affected where we consider that this may undermine the trust of our customers.

8.4 Commitment to independent assurance

Trusted independent assurance is a critical part of providing confidence so we have already engaged our technical and regulatory assurance specialist, Jacobs to work with us from now until 2025. We received and reviewed comprehensive bids from a number of external assurers through an OJEU tender process - an advertised tender with a scoring mechanism designed in advance of receiving full bids. As a result of this process, we've selected Jacobs as our technical auditor for the next six years. They offered the strongest package of assurance while also demonstrating value for money. During the last few years, Jacobs have provided a number of independent reports and presented their findings to the Severn Trent Disclosure Committee, Audit Committee and Board while developing a cooperative relationship with data providers and owners across the wider business. Jacobs have built a strong historical knowledge of our systems and processes, which will enable them to continue to act as a 'critical eye' and challenge us in areas of potential risk or non-compliance over the coming years.

8.5 Transparency and challenge

From an external stakeholder perspective, we will continue to share our operational performance with CCWater on a quarterly basis and consult with external stakeholders on our assurance plans to ensure we receive appropriate levels of customer challenge and scrutiny. Our communications and customer research teams will also continue to look at the best ways of sharing our regulatory reporting information in a transparent way that is accessible and engaging to our customers.

As a public service we want to be transparent about how we balance the needs of our customers, our strategic plans as a business and a fair return for our investors. We believe we are prudent in how we manage financial risk and even-handed in the way we share the returns from our outperformance with customers and shareholders; we will continue to pay our taxes in full and on time; pay dividends and Executive salaries that are reasonable and sustainable and linked to the delivery of outcomes to customers; and avoid complex offshore financial vehicles.

Detailed historical financial information is shared with customers and stakeholders through the Severn Trent Water website, where we will continue to disclose this information throughout the next period to 2025. Our regulatory financial reporting is subject to external assurance by our third line financial auditors, Deloitte, as detailed in section 6 and 7.

Severn Trent Water is part of the Severn Trent Plc group, which also publishes its own ARA. This contains information regarding our dividend policy. We also publish a history of our dividend payments for Severn Trent Plc going back to 1990. This ensures clarity about how our investors are rewarded based on our performance through the group's activities. This information will continue to be subject to third line assurance prior to publication. Going forward from 2020, we are introducing our new community dividend, which aims to share our success with our customers. We're also committed to adopting greater transparency about how we deliver for all our stakeholders but adopting four core principles:

- Dividends will be fair and balanced
- Dividends will be transparent
- Dividends should promote continued outperformance
- Dividends will allow us to maintain financial resilience in the long term

We recognise that these elements are growing areas of interest to our customers given the ongoing national debate around executive pay and renationalisation. While the information we've published in our ARA and APR is very detailed, we recognise that it may not be accessible to all segments of our customer base, we will provide a summary of this information in our customer APR. Going forward, we'll consider how best to display this information while complying with current and future statutory and regulatory reporting requirements including the expectations of Ofwat's "Putting the Sector back in balance" proposals:

- On dividend policy, the steps we are taking are explained above.
- On the performance related element of Executive pay, we are committed to being a role model for private companies that deliver public services underpinned by fairness, transparency and alignment running through our entire bonus scheme from top to bottom of the Company.
- On benefit sharing, our Board has reiterated its commitment to implementing the default gearing outperformance benefit sharing mechanism. We note Ofwat's concerns about the risk of companies and their investors retaining all the benefits of high gearing arrangements. In our business plan we explained that if we are geared to a high level

(70%) - although we have no plans to do so - we would share financing benefits from this structure with customers.

- On financial resilience, we have included the required steps in our business plan, which our Board is committed to fulfil.

Changes in republished Annual Performance Report

Changes in republished Annual Performance Report 2018/19

About this section

We're committed to providing accurate, clear and understandable information which can be trusted by our customers and other stakeholders. Our Annual Performance Report ('APR') is an important document in providing this information.

Since we first published our APR on 15 July, we have identified some changes to the data originally reported and have made these in this republished version. We have included this section to explain: what we've changed; the nature of the change; what this means for our customers and other stakeholders; and the improvements we're making for future reporting.

Summary of changes

The table below summarises the changes we have made. We expect the impact of these on our customers and other stakeholders to be minimal.

Change number	Data table	Description of change	Type of change
1	1C – Statement of financial position	Restatement of the differences between statutory and RAG definitions and resulting Statement of financial position.	Restatement
2	1E – Net debt	Restatement of net debt	Restatement
3	4H – Financial metrics	<ul style="list-style-type: none"> Recalculation of adjusted interest cover. Restatement of retail outperformance in cumulative Return on Regulated Equity (RoRE). Flow through of changes to regulatory Balance sheet. 	Recalculation
4	4V – Operating costs Water Resources	Reclassification of service charges and discharge consents as Environment Agency service charges and discharge consents.	Reclassification
5	4W – Operating costs Sludge	Restatement of Traffic Management Act costs.	Restatement

Summary of assurance

We have performed assurance on the above changes using the risk based approach outlined in our Assurance Summary. All changes have received three lines of assurance.

We've obtained an updated audit opinion from our auditors, Deloitte, for sections 1 and 2 of our Annual Performance Report. This can be found on pages 59 to 61.

Detail of changes

1 Table 1C – Statement of financial position

Observation

The starting point for the regulatory Statement of financial position is the statutory balance sheet for the Severn Trent Water Group. This includes Severn Trent Water's regulated subsidiary, Hafren Dyfrdwy, which is excluded from the regulatory accounts of the Company. In our original submission we did not identify all of the consolidation adjustments required to correctly exclude Hafren Dyfrdwy from the Statement of financial position.

What have we changed?

We've updated the differences between statutory and RAG adjustments schedule on page 66 to correctly exclude Hafren Dyfrdwy, and restated the Statement of financial position on page 65.

Customer and/or other stakeholder impact

We do not expect this change to have an impact as customers and stakeholders have access to the Severn Trent Water Group and Company statutory financial statements.

Reporting improvements

We've made significant improvements to our internal procedure notes to include the detailed steps required to exclude Hafren Dyfrdwy, including the complex consolidation adjustments. We'll also look at systemising the deconsolidation to reduce the risk arising from human error.

2 Table 1E – Net debt

Observation

In our original submission it was unclear how net debt reconciled to the borrowings and cash figures seen in the Statement of financial position. In addition, we identified an arithmetic error in the calculation of the weighted average number of years to maturity of our fixed rate debt.

What have we changed?

The change described in the Statement of financial position has led to the value of both 1E.1 Borrowings (excluding preference shares) and 1E.6 net debt reducing by the value of external debt in Hafren Dyfrdwy (£0.791 million). This change has not impacted gearing or adjusted gearing.

We've improved our reconciliation of statutory to RAG definitions on page 69 to clearly show the differences between the borrowings figure shown in the Statement of financial position and borrowings included in net debt.

In addition, we've restated the weighted average number of years to maturity of our fixed rate debt to 8.6%, up from 7.3%.

Customer and/or other stakeholder impact

The reduction in net debt of £0.791 million (0.01%) has the impact of increasing regulated equity, shown in table 4H Financial metrics, by the same absolute value, which is 0.02% of regulated equity. This is not material and there are no other customer or other stakeholder impacts.

Reporting improvements

We'll use our improved reconciliation of statutory to RAG definitions as a template for future year's reconciliations. This will improve the clarity of our reporting and act as an additional control in our process.

3 Table 4H – Financial metrics

Observation

We identified that we had not used the correct figures for RCV run off in the calculation of adjusted interest cover on line 4H.14. In addition, we identified a formula error in the calculation of retail non household performance used in the calculation of cumulative RoRE.

What have we changed?

We've recalculated adjusted interest cover using the correct RCV run off. This reduces adjusted interest cover from 3.71 to 3.32. No change was required to interest cover.

Retail out performance used in cumulative RoRE has been restated to 0.44% which has decreased cumulative RoRE to 9.04%, down from 9.13%.

Net debt and regulated equity have been amended in the table due to the change to net debt described in change 2 above.

Customer and/or other stakeholder impact

Financial metrics are still within the expected range required to maintain an investment grade credit rating therefore, we do not expect this change to impact our customers or other stakeholders.

Reporting improvements

We'll include an additional step in our second and third line assurance procedures to agree RCV figures used in the calculation to Ofwat correspondence or published data.

4 Table 4V – Operational expenditure, Water Resources (section C)

Observation

We incorrectly reported £0.391 million as service charges and discharge consents from the Canals and Rivers Trust instead of from the Environment Agency.

What have we changed?

We've updated lines 4.19 and 4.20 to present the £0.391 million of costs correctly on the Environment Agency line.

Customer and/or other stakeholder impact

This change will only impact our customers and other stakeholders who are specifically interested in these amounts or are looking to compare them across companies.

Reporting improvements

We'll scrutinise and challenge variances against prior year and our business plan above an agreed threshold.

5 Table 4W – Operational expenditure, Waste (section D)

Observation

In our original APR we understated Traffic Management Act costs on line 4W.44 for Network plus sewage collection by £0.132 million.

What have we changed?

We've updated TMA costs on line 4W.44 to £0.151 million, up from £0.019 million.

Customer and/or other stakeholder impact

This change will only impact our customers and other stakeholders who are specifically interested in these amounts or are looking to compare them across companies.

Reporting improvements

We'll scrutinise and challenge variances against prior year and our business plan above an agreed threshold.

