

# Severn Trent Annual Performance Report 2018

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# About us

We are one of the largest of the 11 regulated water and sewerage companies in England and Wales. We provide high quality services to around 4.3 million households and businesses in the Midlands (our customers in Wales transferred to our group company Hafren Dyfrdwy from 1 July 2018). Our region stretches across the heart of the UK, from the Bristol Channel to the Humber, and from Shropshire to the East Midlands.

## What your bills paid for

Our average household bill for water and sewerage is £348 per year, or just 95 pence per day. And we're proud to say that this is the lowest combined bill across the whole of England and Wales.

## Serving our communities

Serving our 4.3m customers and communities is at the heart of everything we do.

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.

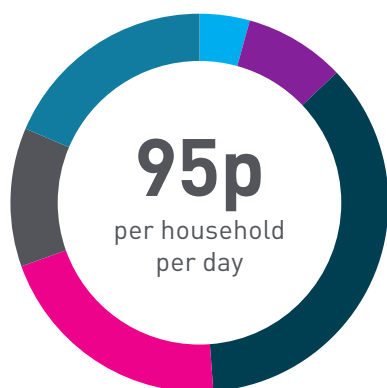
We made 45 commitments in total in our current five year business plan (for 2015-20). Some of these apply for this year, and others are for future years.

This report summarises how we've done against the 38 commitments for this year and provides a view of performance to 2020. Fuller details, including our financial performance based on Ofwat's

regulatory accounts framework, are published in our Annual Performance Report 2018.

Our Water Forum, an independent multi-stakeholder group, plays an important role in reviewing our progress throughout 2015-20. We've included the comments they've made on our delivery this year.

## How your money is spent



# About this report

The Annual Performance Report (APR) provides:

- a clear and assured account of our financial performance for each price control, based on Ofwat's regulatory accounts framework to enable stakeholders to consistently assess our relative and absolute performance; and
- a clear, detailed and assured account of our performance across our 45 performance commitments for 2015-20.

Our commitments are based on the areas of service that are most important to our customers, and the improvements they want to see. Before we agreed them, they were rigorously scrutinised by both the Water Forum and Ofwat to ensure that they were sufficiently challenging, in customers' interests and what they were willing to pay for.

There are four main sections in the annual performance report:

Section	Content
1 Regulatory financial reporting	A baseline level of historical cost financial information reconciled to the company's statutory accounts.
2 Price review and additional segmental reporting	Disaggregated information on revenue and costs, aligned to the way in which price controls (and associated regulatory performance commitments and incentives) have been set to allow stakeholders to review companies' performance against final determinations.
3 Performance summary	A high-level report of the progress we have made on our plan and against our 45 performance obligations.
4 Additional regulatory information	Additional financial and non-financial information, including further disaggregation of revenue and costs, financial metrics, current cost reporting and non-financial operational data.

We are also publishing:

- A compliance statement which confirms that we have complied with all our relevant statutory, licence and regulatory obligations and are taking appropriate steps to manage and mitigate any risks identified.
- A data assurance summary of the results of the data assurance activities we have carried out to demonstrate that the information we have provided our customers is accurate.
- A separate customer facing Annual Performance Report which summarises our performance in a way that our customers have told us meets their needs and makes it easier for them to hold us to account.

In addition Severn Trent Water has published its Annual Report and Accounts for the year ended 31 March 2018, which is available on our website ([stwater.co.uk](http://stwater.co.uk)). Where disclosures in the Annual Report fulfil requirements for the APR we have provided a cross reference in this document rather than duplicating the information.

## Clear and transparent reporting

We have grouped our performance commitments into eight areas - service now (water, waste water and retail), asset health, environment, resilience, community and responsible investment. This makes it easier for our customers and stakeholders to hold us to account by being able to more easily compare our performance to other companies.

We've also used a simple assessment to show whether we have already met our target or we are on track to do so - red, amber and green.

It's important that we report our performance as clearly and transparently as possible. Where we can we have compared our performance to other water companies in an attempt to show our customers and stakeholders where we stand in the industry. We will publish an updated version of our customer facing Annual Performance Report later this summer; it will include more comparative assessment once other companies' 2018 performance is available. The Discover Water website also provides a really useful way of comparing performance across the water sector.

**You can find out more about how water companies in England and Wales are performing on the Discover Water website.**

**Discover**  
**Water.co.uk**

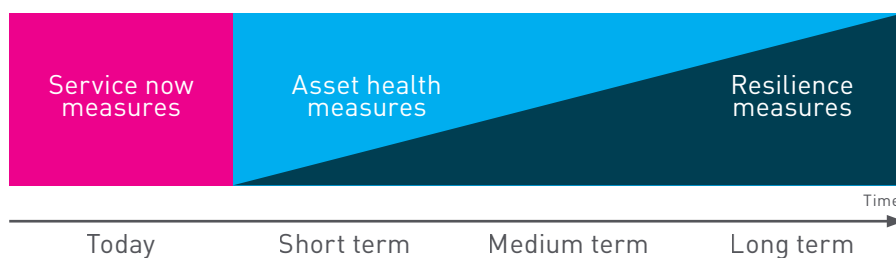
## How our measures fit together

Our measures cover different time horizons:

- service now metrics. These provide important information on the resilience of services that have immediate impact;
- asset health metrics. These capture resilience issues that occur frequently (that is many times per year); and
- resilience measures. These focus on resilience issues that occur far less frequently (e.g. drought), or evolve on a long timescale (e.g. flood risk).

It's only when we look at all these aspects together can we truly understand our level of overall resilience.

## Understanding and measuring resilience



# Our year in summary

## Our 2017/18 performance

<b>Service now - Waste</b>  <b>£86m outperformance payment</b>	<b>Asset health</b>  <b>£1m underperformance penalty</b>	<b>Resilience</b>	<b>Environment</b>  <b>£2m outperformance payment</b>
<b>Service now - Water</b>  <b>£22m underperformance penalty</b>	<b>Service now - Retail</b>	<b>Serving our community</b>	<b>Responsible, efficient investment</b>

We've summarised our 45 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 Section 3 of this report.

### Some good improvements delivered for our customers

We've made some good improvements for customers this year - we've improved the quality of the water they receive, reduced the risk of sewer flooding to their homes and gardens and improved the environment they live and work in. We've worked with customers and stakeholders on building a greener future and helped our most vulnerable customers who were struggling to pay their bills. Overall, we're on track to deliver 80% of our targets - that would make us upper quartile based on 2017 data. And we've done all this while continuing to have the lowest average household bills in England and Wales.

### We've made progress but have more to do

Our supply interruptions performance was extremely disappointing - our worst for five years. We experienced a small number of large failures throughout the year culminating in the freeze thaw in March 2018. Although we responded well in each case, we need to get better at dealing with risks before they occur. We are developing our action plan to ensure we learn the lessons from these events and prepare for and respond to them better in future. Our leakage performance also suffered as a result of the freeze thaw - especially disappointing as we had been on track to meet our target with a matter of weeks to go.

Another area of frustration was that the number of water treatment sites where coliforms were detected rose from five to eight. While coliforms are harmless bacteria, their presence can be an indication that water quality is not as high as it should be. We know our strategy of investing in our people and our assets is right because it has driven strong performance for the last two years - including a 38% improvement in sites with coliform detections from 2015 - and our approach is supported by the Drinking Water

Inspectorate. We'll continue with our strategy and focus on our consistency of delivery. We can, and will, improve.

### Incentives that reflect our performance

We're fully supportive of the incentive environment that Ofwat has created. A clear link between the levels of service we provide and the amount we charge our customers has encouraged us to think differently about how we work and to develop a sharper focus than ever on improving customer service. The result has been a great performance which has generated significant outperformance payments of £88 million in our waste water service. This reflects the hard work we've put in to make significant improvements to the service our customers have received. This is particularly the case on sewer flooding where we've made much more progress at a much faster rate than we thought possible. It shows the benefits of investing in people, assets and data - we're applying this learning across all areas.

This will be offset by a £23m underperformance penalty for our poor water service performance this year. This is on top of compensation paid to customers who were directly affected by an incident.



## Summary of outperformance payments and underperformance penalties for 2017/18

£m, nominal prices	Uplifted for tax	No tax adjustment
Number of complaints about drinking water	-2.994	-2.426
Number of sites with coliform failures	-0.572	-0.463
Leakage levels*	-2.126	-1.722
Speed of response in repairing leaks	-1.736	-1.406
Number of minutes customers go without supply	-20.683	-16.753
Customers at risk of low pressure	0.045	0.036
Size of our carbon footprint (water)	-0.596	-0.483
Number of internal sewer flooding incidents	15.753	12.760
Number of external sewer flooding incidents	89.958	72.886
Number of category 3 pollution incidents	3.158	2.533
Size of our carbon footprint (waste water)	0.054	0.044
<b>Total water</b>	<b>-28.661</b>	<b>-23.216</b>
<b>Total waste water</b>	<b>108.893</b>	<b>88.203</b>
<b>Total company</b>	<b>80.232</b>	<b>64.998</b>

\*Includes additional penalty for 2016/17

### Serving our customers and communities

We're proud of our continuing efforts to do more every year to help vulnerable customers who are struggling to make ends meet. In its third year, our Big Difference scheme helped 36,000 customers access discounts of up to 90%. This is just one part of our various schemes that enable us to meet commitment to help at least 50,000 customers with their bills every year.

Experience tells us that when customers are struggling to pay their water bills, there are often issues in other areas of their lives. So we've now expanded our care and assistance team to give us the capacity to engage with agencies such as housing associations, the NHS, Citizens Advice and other utility companies. By working together, sharing information and adopting a holistic approach

to vulnerable people, we believe we'll be able to do even more to play a key role at the heart of local communities.

We continued to perform well on the Institute of Customer Service's UK index, which measures customer satisfaction across the Utilities sector, achieving upper quartile position for customer satisfaction, equivalent to fourth position in the Utilities sector. However, our customer Service Incentive Mechanism score - which Ofwat uses to encourage good performance - is disappointing. We are working hard to improve the consistency of our customer experience. There's still more to do, but it's encouraging to see that our drive to embed customers at the centre of all we do is paying off where it matters most - in the hearts and minds of customers themselves.

## Building a resilient future to protect service and the environment

Taking a longer term view, we're pleased that our performance on environmental and resilience measures remains strong. We've reduced the number of pollution events - including the most serious incidents. Our compliance measures are stable and we're making good progress on improving our treatment works to protect our environment. It is great to see all these achievements come together and we have regained the mark of exceptional environmental performance in our sector, the coveted 4\* status from the Environment Agency during the year.

Taking less water out of the environment, especially from sources that are environmentally sensitive, can help protect habitats and species now and in the future. We currently don't have any sites included in the water industry's Abstraction Incentive Mechanism (AIM) because of the type of water sources we abstract from. However, our Water Framework Directive commitment does look at improving our water sources to help them move to good ecological status, as agreed with the Environment Agency. We're also working with stakeholders to develop a commitment to measure our impact on water sources for the 2020-25 plan.

And we know that real, sustainable change can only come if we work in partnership with others - we're helping farmers make small changes on their farms which could have a big impact on the quality of our water sources and we're educating customers - especially children - on how to use water more wisely and what not to put down their toilets. It's essential

that our system is resilient enough to deal with shocks and stresses - and were pleased to have delivered key milestones on our Birmingham Resilience Programme which should help secure water supply for generations to come.

## Delivering improvements to 2020 and beyond

We are looking forward to the challenge of the coming year and for the remainder of the 2015-20 period.

We've got a lot to do - our supply interruptions performance needs to improve by 77%, coliform failures by 25% and water quality complaints by 21%. We're investing responsibly to deliver success. We're aiming for all areas to be on target - accepting that there will be some aspects we'll still need to work on.

## Our incentives are designed to drive improved service

Like all companies, our bills reflect the service our customers receive. When we miss our targets, underperformance penalties reduce our customers' bill; but when we deliver exceptional service outperformance payments allow us to reclaim the cost we've incurred. We believe our incentives are amongst the strongest in the industry.

## Ensuring trust and confidence

We've include an additional £0.8m penalty this year to reflect the increase in real leakage losses in 2016/17. We're not required to do this - we were ahead of our leakage target last year - but want our customers to be confident that we will do the right thing.

Previously we have highlighted improvements in our reporting processes and changes in our targets. This year we would highlight that we are exploring new options to help meet our water service carbon commitment. If these options are supported by our Water Forum we will incorporate them in to reporting in future years.

Through the process of collating our net proceeds from land sales for 2017/18, we identified an error in our 2016/17 APR submission for these numbers. The figures had been understated by £2.0m because the list of disposals was not complete. We are using the lessons learned from this to update our procedures and strengthen controls in this area. We have corrected the reported numbers in our PR14 reconciliation data table for land sales, App9, as part of our PR19 submission.

## Summary of outperformance payments and underperformance penalties 2015-20

£m, nominal prices	2015/16	2016/17	2017/18	Total
Water	-1.0	-0.9	-23.2	-25.1
Wastewater	19.8	41.1	88.2	149.1
Total	18.8	40.3	65.0	124.0



# Our customer challenge group's view of performance

Our performance commitments for 2015-20 were developed through lots of consultation with our customers and challenge from our independent multi-stakeholder group, the Water Forum. As we progress through 2015-20, the Water Forum will continue to challenge us to deliver the commitments we've made. Their view of this year's performance is:

*"We welcome this report in which the company explains its performance to customers. We are impressed with the progress Severn Trent has continued to make in important areas such as reducing the number of households suffering from distressing flooding from sewers and financially supporting almost 52,000 customers who found themselves facing difficult circumstances. The Birmingham Resilience Programme is also progressing well.*

*We are also pleased they have worked hard to improve in areas where performance had previously not met customer expectations including to reduce pollution events which harm the environment. They've also reduced the number of complaints about drinking water quality - although there is still much more to do to meet the target in this area. We are also disappointed to see that the company has not made significant improvements in the Service Incentive Mechanism (SIM), the key customer metric for the industry.*

*Clearly, Severn Trent has had a very poor year on supply interruptions and leakage. They must improve the way in which they respond to problems and invest appropriately on their water service - it is important that they continue to commit investment to improve performance. We're pleased that Severn Trent has increased payments to those customers directly affected by service failures. We also note that they have chosen to increase their leakage penalty to align with Ofwat's future direction - this is vital to gain customers' trust and confidence. We recognise the comments and challenges presented in both the Ofwat and CCWater reports on the freeze/thaw event and will scrutinise Severn Trent's improvement plans carefully.*

*Two years remain in the 2015-20 period; we would like Severn Trent to focus on delivering a consistently better service to meet customers' expectations. This represents a challenge, but an essential one given the level of ambition we need to see in their 2020-25 plan."*

# Disclosure required by RAG 3

In addition to the disclosures that are set out in the tables in Sections 1 - 4, RAG 3 sets out requirements for narrative disclosures in the Annual Performance Report. The statements set out below address those requirements.

## 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 Annual Report and Accounts, which is available on the company's website ([stwater.co.uk](http://stwater.co.uk)).

The company's Annual Report and Accounts includes a long term viability statement in the Strategic Report on pages 51-53.

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 2017/18 amounted to £204.0 million (2017: £195.5 million), being 20.6p per share (2017: 19.6p per share).

## Disclosure of information to auditor

The Companies Act requires directors to make a statement in the company's Annual Report and Accounts regarding the provision of information to the auditor. RAG 3 requires an equivalent statement to also be made in the Annual Performance Report. This statement is set out below.

In the case of each of the persons who are directors of the company at the date when this report was approved 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.

## Risk and compliance

Our compliance statement is published on our website. In summary the statement confirms that Severn Trent Water:

- a) Considers it has a full understanding of, and is meeting, its obligations and has taken steps to understand and meet customer expectations;
- b) Has satisfied itself that it has sufficient processes and internal systems of control to fully meet its obligations and has appropriate systems and processes in place to allow it to identify, manage and review its risks; and
- c) Sets out the steps the company is taking or will take to manage and/or mitigate any material or potential material risk which is identified and defines materiality for the purposes of this.

## Group structure

The ownership structure of Severn Trent Water Limited within the Severn Trent group can be found on the Severn Trent plc website ([severntrent.com](http://severntrent.com)).

## Statement of Directors' responsibilities

The directors are responsible for the preparation of the Annual Performance Report 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:

- a) Confirm that, in their opinion, the company has sufficient financial and management resources for the next twelve months;
- b) 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;
- c) 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;

- d) 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
- e) Keep proper accounting records which comply with Condition F.

### **Diversification and the protection of the core business**

The ring fencing provisions in the company's licence (Condition F6a) require it to make certain statements in relation to its ability to continue to carry out its regulated activities for at least a year after the date of the report. This statement is set out below.

Severn Trent Water hereby advises:

- a) That 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
- b) That 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.

### **Ring Fencing**

Paragraph 3.1 of Condition K requires 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 Condition F6a, the company is required to confirm that it is in compliance with Condition K3.1. This statement is set out below.

In accordance with the requirements of the Water Services Regulation Authority, the board confirmed that, as at 31 March 2018, it had available to it sufficient rights and assets, not including financial resources, which would enable a special administrator to manage the affairs, business and property of the company in order that the purposes of a special administration order could be achieved if such an order were made.



**Liv Garfield**  
Chief Executive  
Severn Trent Water Limited

**Andy Duff**

Chairman  
Severn Trent Water Limited

**John Coghlan**  
Chairman - Audit Committee  
Severn Trent plc

For and on behalf of the board  
13 July 2018

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

## Opinion on Annual Performance Report

We have audited the following tables within Severn Trent Water Limited's ("the Company") Annual Performance Report for the year ended 31 March 2018:

- 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) and 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) and the related notes hereafter referred to as "the Regulatory Accounting Statements".

We have not audited the outcome performance table (tables 3A to 3D) and the additional regulatory information in tables 4A to 4W.

In our opinion, Severn Trent Water Limited's Regulatory Accounting Statements have been properly prepared in accordance with financial reporting provisions of Condition F, the Regulatory Accounting Guidelines issued by the WSRA (RAG 1.08, RAG 2.07, RAG 3.10, RAG 4.07 and RAG 5.07) and the accounting policies (including the Company's published accounting methodology statement, as defined in RAG 3.10, appendix 2), set out in note 1.

## 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' issued by the Institute of Chartered Accountants in England & Wales. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the Regulatory Accounting Statements in the UK, including the Financial Reporting Council'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.

Our responsibilities under ISAs (UK) are further described in the Auditor's responsibilities for the audit of the Regulatory Accounting Statements section of our report.

## 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 3.10, 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.

The Regulatory Accounting Statements are separate from the statutory financial statements of the Company and have 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 16-40 have been drawn up in accordance with Regulatory Accounting Guidelines with a number of departures from IFRSs. 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 respective directors' and auditor's responsibilities sections below. As a result, the Regulatory Accounting Statements may not be suitable for another purpose.

Our opinion is not modified in this respect.

### 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 when:

- 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.

However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Company's ability to continue as a going concern.

### Other information

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

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

We have nothing to report based on these responsibilities.

### Responsibilities of the Directors

As explained more fully in the Statement of Directors' Responsibilities set out on page 10, 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, as defined in RAG 3.10, 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 as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's 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 Regulatory Accounting Statements is located on the FRC's website at: [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities). This description forms part of our auditor's report.

## 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 within the Annual Performance Report is separate from our opinion on the statutory financial statements of the Company for the year ended 31 March 2018 on which we reported on 22 May 2018, 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

13 July 2018



# Section 1

## Regulatory financial reporting

# 1A - Income statement

Year ended 31 March 2018

Line description		Adjustments				Total appointed activities
		Statutory	Differences between statutory and RAG definitions	Non-appointed	Total adjustments	
		£m	£m	£m	£m	
1A.1	Revenue	1606.9	(44.2)	(13.7)	(57.9)	1549.0
1A.2	Operating costs	(1081.8)	20.4	4.3	24.7	(1057.1)
1A.3	Other operating income	0.0	4.4	0.0	4.4	4.4
1A.4	Operating profit	525.1	(19.4)	(9.4)	(28.8)	496.3
1A.5	Other income	0.0	16.0	2.9	18.9	18.9
1A.6	Interest income	66.5	(63.7)	0.0	(63.7)	2.8
1A.7	Interest expense	(282.4)	57.2	1.2	58.4	(224.0)
1A.8	Other interest expense	0.0	(14.2)	0.0	(14.2)	(14.2)
1A.9	Profit before tax and fair value movements	309.2	(24.1)	(5.3)	(29.4)	279.8
1A.10	Fair value gains/(losses) on financial instruments	(7.2)	0.0	0.0	0.0	(7.2)
1A.11	Profit before tax	302.0	(24.1)	(5.3)	(29.4)	272.6
1A.12	UK Corporation tax	(32.5)	1.9	1.0	2.9	(29.6)
1A.13	Deferred tax	(27.1)	1.8	0.0	1.8	(25.3)
1A.14	Profit for the year	242.4	(20.4)	(4.3)	(24.7)	217.7
1A.15	Dividends	(204.0)	0.0	4.3	4.3	(199.7)
A	Tax analysis					
1A.16	Current year	38.7	(1.9)	(1.0)	(2.9)	35.8
1A.17	Adjustments in respect of prior years	(6.2)	0.0	0.0	0.0	(6.2)
1A.18	UK Corporation tax	32.5	(1.9)	(1.0)	(2.9)	29.6
		Non-appointed				
B	Analysis of non-appointed revenue					
1A.19	Imported sludge	0.2				
1A.20	Tankered waste	8.0				
1A.21	Other non-appointed revenue	5.5				
1A.22	Revenue	13.7				

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

	Adjustments								Total differences
	Include discontinued operations	Exclude Hafren Dyfrdwy	Capitalisation of interest and related depreciation	Share of group pension scheme	ROCs & LECs income	Developer services & repair of damages recharges	Profit on fixed asset disposals and non-operating income and deferred credits	Pension scheme net interest costs	
	£m	£m	£m	£m	£m	£m	£m	£m	£m
Revenue	0.0	(27.9)	0.0	0.0	(19.0)	2.6	0.1	0.0	(44.2)
Operating costs	(1.5)	22.2	4.4	(0.5)	19.0	(2.6)	(20.6)	0.0	20.4
Other operating income	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	4.4
Operating profit	(1.5)	(5.7)	4.4	(0.5)	0.0	0.0	(16.1)	0.0	(19.4)
Other income	0.0	0.0	0.0	0.0	0.0	0.0	16.0	0.0	16.0
Interest income	0.0	(1.7)	0.0	0.0	0.0	0.0	0.0	(62.0)	(63.7)
Interest expense	0.0	4.6	(24.6)	0.0	0.0	0.0	0.0	77.2	57.2
Other interest expense	0.0	0.0	0.0	1.0	0.0	0.0	0.0	(15.2)	(14.2)
Profit before tax and fair value movements	(1.5)	(2.8)	(20.2)	0.5	0.0	0.0	(0.1)	0.0	(24.1)
Fair value losses on financial instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit before tax	(1.5)	(2.8)	(20.2)	0.5	0.0	0.0	(0.1)	0.0	(24.1)
UK corporation tax	0.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	1.9
Deferred tax	0.0	(0.8)	3.9	(1.3)	0.0	0.0	0.0	0.0	1.8
<b>Profit for the year</b>	<b>(1.2)</b>	<b>(2.0)</b>	<b>(16.3)</b>	<b>(0.8)</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.0</b>	<b>(20.4)</b>

# 1B - Statement of comprehensive income

Year ended 31 March 2018

Line description	Statutory	Differences between statutory and RAG definitions	Adjustments		Total appointed activities
			Non-appointed	Total adjustments	
	£m	£m	£m	£m	£m
1B.1 Profit for the year	242.4	(20.4)	(4.3)	(24.7)	217.7
1B.2 Actuarial gains/(losses) on post employment plans	29.7	(17.8)	0.0	(17.8)	11.9
1B.3 Other comprehensive income	10.5	0.0	0.0	0.0	10.5
<b>1B.4 Total comprehensive income for the year</b>	<b>282.6</b>	<b>(38.2)</b>	<b>(4.3)</b>	<b>(42.5)</b>	<b>240.1</b>

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

	Per income statement	Reverse Hafren Dyfrdwy	Net actuarial difference on pensions	Deferred tax on movement on retirement benefit obligations	Total differences
	£m	£m	£m	£m	£m
Profit for the year	(20.4)	0.0	0.0	0.0	(20.4)
Actuarial losses on post employment plans	0.0	(6.8)	(13.2)	2.2	(17.8)
<b>Total</b>	<b>(20.4)</b>	<b>(6.8)</b>	<b>(13.2)</b>	<b>2.2</b>	<b>(38.2)</b>

# 1C - Statement of financial position

Year ended 31 March 2018

Line description	Statutory	Differences between statutory and RAG definitions	Adjustments		Total appointed activities
			Non-appointed	Total adjustments	
	£m	£m	£m	£m	£m
<b>A Non-current assets</b>					
1C.1 Fixed assets	8362.7	(248.3)	0.0	(248.3)	8114.4
1C.2 Intangible assets	149.2	(66.8)	0.0	(66.8)	82.4
1C.3 Investments - loans to group companies	0.0	0.0	0.0	0.0	0.0
1C.4 Investments - other	1470.0	84.7	0.0	84.7	1554.7
1C.5 Financial instruments	36.0	0.0	0.0	0.0	36.0
1C.6 Retirement benefit assets	18.2	(18.2)	0.0	(18.2)	0.0
<b>1C.7 Total non-current assets</b>	<b>10036.1</b>	<b>(248.6)</b>	<b>0.0</b>	<b>(248.6)</b>	<b>9787.5</b>
<b>B Current assets</b>					
1C.8 Inventories	7.6	(0.4)	0.0	(0.4)	7.2
1C.9 Trade & other receivables	534.3	(12.9)	0.0	(12.9)	521.4
1C.10 Financial instruments	0.2	0.0	0.0	0.0	0.2
1C.11 Cash & cash equivalents	12.1	(0.8)	0.0	(0.8)	11.3
<b>1C.12 Total current assets</b>	<b>554.2</b>	<b>(14.1)</b>	<b>0.0</b>	<b>(14.1)</b>	<b>540.1</b>
<b>C Current liabilities</b>					
1C.13 Trade & other payables	(449.3)	119.3	0.0	119.3	(330.0)
1C.14 Capex creditor	0.0	(81.8)	0.0	(81.8)	(81.8)
1C.15 Borrowings	(304.2)	1.7	0.0	1.7	(302.5)
1C.16 Financial instruments	0.0	0.0	0.0	0.0	0.0
1C.17 Current tax liabilities	(7.9)	1.0	0.0	1.0	(6.9)
1C.18 Provisions	(16.6)	0.0	0.0	0.0	(16.6)
<b>1C.19 Total current liabilities</b>	<b>(778.0)</b>	<b>40.2</b>	<b>0.0</b>	<b>40.2</b>	<b>(737.8)</b>
<b>1C.20 Net current assets/(liabilities)</b>	<b>(223.8)</b>	<b>26.1</b>	<b>0.0</b>	<b>26.1</b>	<b>(197.7)</b>
<b>D Non-current liabilities</b>					
1C.21 Trade & other payables	(1008.9)	1008.9	0.0	1008.9	0.0
1C.22 Borrowings	(5147.7)	33.1	0.0	33.1	(5114.6)
1C.23 Financial instruments	(108.2)	0.0	0.0	0.0	(108.2)
1C.24 Retirement benefit obligations	(529.3)	38.5	0.0	38.5	(490.8)
1C.25 Provisions	(6.2)	0.0	0.0	0.0	(6.2)
1C.26 Deferred income - G&C's	0.0	(701.9)	0.0	(701.9)	(701.9)
1C.27 Deferred income - adopted assets	0.0	(311.5)	0.0	(311.5)	(311.5)
1C.28 Preference share capital	0.0	0.0	0.0	0.0	0.0
1C.29 Deferred tax	(676.6)	27.1	0.0	27.1	(649.5)
<b>1C.30 Total non-current liabilities</b>	<b>(7476.9)</b>	<b>94.2</b>	<b>0.0</b>	<b>94.2</b>	<b>(7382.7)</b>
<b>1C.31 Net assets</b>	<b>2335.4</b>	<b>(128.3)</b>	<b>0.0</b>	<b>(128.3)</b>	<b>2207.1</b>
<b>E Equity</b>					
1C.32 Called up share capital	1.0	(0.2)	0.0	(0.2)	0.8
1C.33 Retained earnings & other reserves	2334.4	(128.1)	0.0	(128.1)	2206.3
<b>1C.34 Total Equity</b>	<b>2335.4</b>	<b>(128.3)</b>	<b>0.0</b>	<b>(128.3)</b>	<b>2207.1</b>

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

	Adjustments			Reclassifications		Total differences
	Capitalisation of interest	Exclude Hafren Dyfrdwy	Share of group pension scheme	Capital creditor reclass	Deferred income reclass	
	£m	£m	£m	£m	£m	
<b>Non-current assets</b>						
Fixed assets	(109.5)	(138.8)	0.0	0.0	0.0	(248.3)
Intangible assets	0.0	(66.8)	0.0	0.0	0.0	(66.8)
Investments - loans to group companies	0.0	0.0	0.0	0.0	0.0	0.0
Investments - other	0.0	84.7	0.0	0.0	0.0	84.7
Financial instruments	0.0	0.0	0.0	0.0	0.0	0.0
Retirement benefit assets	0.0	(18.2)	0.0	0.0	0.0	(18.2)
<b>Total non-current asset</b>	<b>(109.5)</b>	<b>(139.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(248.6)</b>
<b>Current assets</b>						
Inventories	0.0	(0.4)	0.0	0.0	0.0	(0.4)
Trade and other receivables	0.0	(12.9)	0.0	0.0	0.0	(12.9)
Financial instruments	0.0	0.0	0.0	0.0	0.0	0.0
Cash and cash equivalents	0.0	(0.8)	0.0	0.0	0.0	(0.8)
<b>Total current assets</b>	<b>0.0</b>	<b>(14.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(14.1)</b>
<b>Current liabilities</b>						
Trade and other payables	0.0	22.8	0.0	81.8	14.7	119.3
Capex creditor	0.0	0.0	0.0	(81.8)	0.0	(81.8)
Borrowings	0.0	1.7	0.0	0.0	0.0	1.7
Financial instruments	0.0	0.0	0.0	0.0	0.0	0.0
Current tax liabilities	0.0	1.0	0.0	0.0	0.0	1.0
Provisions	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total current liabilities</b>	<b>0.0</b>	<b>25.5</b>	<b>0.0</b>	<b>0.0</b>	<b>14.7</b>	<b>40.2</b>
<b>Net current assets/(liabilities)</b>	<b>0.0</b>	<b>11.4</b>	<b>0.0</b>	<b>0.0</b>	<b>14.7</b>	<b>26.1</b>
<b>Non-current liabilities</b>						
Trade and other payables	0.0	10.2	0.0	0.0	998.7	1,008.9
Borrowings	0.0	33.1	0.0	0.0	0.0	33.1
Financial instruments	0.0	0.0	0.0	0.0	0.0	0.0
Retirement benefit obligations	0.0	0.0	38.5	0.0	0.0	38.5
Provisions	0.0	0.0	0.0	0.0	0.0	0.0
Deferred income - grants and contributions	0.0	0.0	0.0	0.0	(701.9)	(701.9)
Deferred income -adopted assets	0.0	0.0	0.0	0.0	(311.5)	(311.5)
Preference share capital	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax	19.1	14.5	(6.5)	0.0	0.0	27.1
<b>Total non-current liabilities</b>	<b>19.1</b>	<b>57.8</b>	<b>32.0</b>	<b>0.0</b>	<b>(14.7)</b>	<b>94.2</b>
<b>Net assets</b>	<b>(90.4)</b>	<b>(69.9)</b>	<b>32.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(128.3)</b>
<b>Equity</b>						
Called up share capital	0.0	(0.2)	0.0	0.0	0.0	(0.2)
Retained earnings and other reserves	(90.4)	(69.7)	32.0	0.0	0.0	(128.1)
<b>Total equity</b>	<b>(90.4)</b>	<b>(69.9)</b>	<b>32.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(128.3)</b>



# 1D - Statement of cash flows

Year ended 31 March 2018

Line description	Statutory	Differences between statutory and RAG definitions	Adjustments			Total appointed activities
			Non-appointed	Total adjustments		
	£m	£m	£m	£m		£m
<b>A Statement of cashflows</b>						
1D.1 Operating profit	525.1	(19.4)	(9.4)	(28.8)		496.3
1D.2 Other income	0.0	16.0	2.9	18.9		18.9
1D.3 Depreciation	340.6	(10.6)	0.0	(10.6)		330.0
1D.4 Amortisation - G&C's	(14.3)	0.0	0.0	0.0		(14.3)
1D.5 Changes in working capital	(32.6)	1.5	0.0	1.5		(31.1)
1D.6 Pension contributions	(33.8)	0.0	0.0	0.0		(33.8)
1D.7 Movement in provisions	8.8	0.5	0.0	0.5		9.3
1D.8 Profit on sale of fixed assets	(4.6)	0.2	0.0	0.2		(4.4)
1D.9 Cash generated from operations	789.2	(11.8)	(6.5)	(18.3)		770.9
1D.10 Net interest paid	(177.4)	2.2	1.2	3.4		(174.0)
1D.11 Tax paid	(14.9)	0.8	1.0	1.8		(13.1)
<b>1D.12 Net cash generated from operating activities</b>	<b>596.9</b>	<b>(8.8)</b>	<b>(4.3)</b>	<b>(13.1)</b>		<b>583.8</b>
<b>C Investing activities</b>						
1D.13 Capital expenditure	(625.2)	13.2	0.0	13.2		(612.0)
1D.14 Grants & Contributions	36.7	(0.8)	0.0	(0.8)		35.9
1D.15 Disposal of fixed assets	5.7	(0.2)	0.0	(0.2)		5.5
1D.16 Other	(0.2)	0.0	0.0	0.0		(0.2)
<b>1D.17 Net cash used in investing activities</b>	<b>(583.0)</b>	<b>12.2</b>	<b>0.0</b>	<b>12.2</b>		<b>(570.8)</b>
<b>1D.18 Net cash generated before financing activities</b>	<b>13.9</b>	<b>3.4</b>	<b>(4.3)</b>	<b>(0.9)</b>		<b>13.0</b>
<b>D Cashflows from financing activities</b>						
1D.19 Equity dividends paid	(204.0)	0.0	4.3	4.3		(199.7)
1D.20 Net loans received	198.4	(5.3)	0.0	(5.3)		193.1
1D.21 Cash inflow from equity financing	0.0	0.0	0.0	0.0		0.0
<b>1D.22 Net cash generated from financing activities</b>	<b>(5.6)</b>	<b>(5.3)</b>	<b>4.3</b>	<b>(1.0)</b>		<b>(6.6)</b>
<b>1D.23 Increase (decrease) in net cash</b>	<b>8.3</b>	<b>(1.9)</b>	<b>0.0</b>	<b>(1.9)</b>		<b>6.4</b>

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

	Discontinued operations	Depreciation on capitalised interest	Exclude Hafren Dyfrdwy	Share of group pension scheme	Non-operating income reclass	Total differences
	£m	£m	£m	£m	£m	£m
<b>Statement of cashflows</b>						
Operating profit	(1.5)	4.4	(5.8)	(0.5)	(16.0)	(19.4)
Other income	0.0	0.0	-	0.0	16.0	16.0
Depreciation	0.0	(4.4)	(6.2)	0.0	0.0	(10.6)
Amortisation - grants and contributors	0.0	0.0	-	0.0	0.0	-
Changes to working capital	0.0	0.0	1.5	0.0	0.0	1.5
Pension contributions	0.0	0.0	-	0.0	0.0	-
Movements in provisions	0.0	0.0	-	0.5	0.0	0.5
Profit on sale of fixed assets	0.0	0.0	0.2	0.0	0.0	0.2
<b>Cash generated from operations</b>	<b>(1.5)</b>	<b>0.0</b>	<b>(10.3)</b>	<b>0.0</b>	<b>0.0</b>	<b>(11.8)</b>
Net interest paid	0.0	0.0	2.2	0.0	0.0	2.2
Tax paid	0.0	0.0	0.8	0.0	0.0	0.8
<b>Net cash generated from operating activities</b>	<b>(1.5)</b>	<b>0.0</b>	<b>(7.3)</b>	<b>0.0</b>	<b>0.0</b>	<b>(8.8)</b>
<b>Investing activities</b>						
Capital expenditure	0.0	0.0	13.2	0.0	0.0	13.2
Grants and contributions	0.0	0.0	(0.8)	0.0	0.0	(0.8)
Disposal of fixed assets	0.0	0.0	(0.2)	0.0	0.0	(0.2)
Other	0.0	0.0	-	0.0	0.0	-
Net cash used in investing activities	0.0	0.0	12.2	0.0	0.0	12.2
<b>Net cash generated before financing activities</b>	<b>(1.5)</b>	<b>0.0</b>	<b>4.9</b>	<b>0.0</b>	<b>0.0</b>	<b>3.4</b>
<b>Cashflows from financing activities</b>						
Equity dividends paid	0.0	0.0	-	0.0	0.0	-
Net loans received	0.0	0.0	(5.3)	0.0	0.0	(5.3)
Cash outflow from equity financing	0.0	0.0	-	0.0	0.0	-
Net cash used in financing activities	0.0	0.0	(5.3)	0.0	0.0	(5.3)
<b>Decrease in net cash</b>	<b>(1.5)</b>	<b>0.0</b>	<b>(0.4)</b>	<b>0.0</b>	<b>0.0</b>	<b>(1.9)</b>

# 1E - Net debt analysis

Year ended 31 March 2018

Line description	Interest rate risk profile			Total £m
	Fixed rate £m	Floating rate £m	Index linked £m	
1E.1 Borrowings (excluding preference shares)	2606.2	1451.8	1328.7	5386.7
1E.2 Preference share capital				0.0
1E.3 Total borrowings				5386.7
1E.4 Cash				(11.3)
1E.5 Short term deposits				0.0
1E.6 Net Debt				5375.4
1E.7 Gearing				61.50%
1E.8 Adjusted gearing				0.00%
1E.9 Full year equivalent nominal interest cost	114.2	26.2	66.9	207.3
1E.10 Full year equivalent cash interest payment	114.2	26.2	26.3	166.7
<b>A Indicative interest rates</b>				
1E.11 Indicative weighted average nominal interest rate	4.38%	1.81%	5.03%	3.85%
1E.12 Indicative weighted average cash interest rate	4.38%	1.81%	1.98%	3.09%
<b>1E.13 Weighted average years to maturity</b>	<b>9.48</b>	<b>4.96</b>	<b>30.32</b>	<b>13.82</b>

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

	Total £m
Current borrowings	304.2
Non-current borrowings	5,147.7
Severn Trent Water group borrowings	5,451.9
Less: Hafren Dyfrdwy debt fair value adjustments	(34.8)
Less: fair value hedge accounting adjustments	(30.4)
Adjusted borrowings	5,386.7
Cash and cash equivalents	(11.3)
<b>Net debt</b>	<b>5,375.4</b>

# Current tax reconciliation

Year ended 31 March 2018

The tax charge for the year ended 31 March 2018 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	272.6	231.0	41.6
Tax at the standard rate of corporation tax in the UK 19% (FD 20%)	51.8	43.9	7.9
Tax effect of expenditure not deductible in determining taxable profits	1.7	0.9	0.8
Capital allowances in excess of depreciation	(15.3)	(19.8)	4.5
Other temporary differences	(2.4)	(0.5)	(1.9)
Impact of change in tax rate	0.0	1.3	(1.3)
Current tax charge before prior year adjustments	35.8	25.8	10.0
Prior year adjustment	(6.2)	0.0	(6.2)
<b>Current tax charge after prior year adjustments</b>	<b>29.6</b>	<b>25.8</b>	<b>3.8</b>

The 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:

- Profit before tax has increased primarily due to operating expenditure efficiencies and a lower effective interest rate on financing;
- Expenditure that is not deductible for tax purposes has increased from the level assumed 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 £6.2m reflects the agreement of prior year's 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; 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.

We are committed to managing our tax affairs in a responsible manner.

# Tax strategy for the appointed business

Year ended 31 March 2018

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 Water Limited 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 otherwise in support of business requirements;
- We will make use of widely claimed incentives that Government has chosen to make available to encourage investment;
- 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 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 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.

# Notes to the Annual Performance Report

## 1. Regulatory reporting

The regulatory accounts as reported on pages 15-28 should be read in conjunction with the financial review set out on pages 41-48 of the consolidated Severn Trent Water Limited Annual Report and Accounts 2018 to aid understanding of the performance of the business.

### Differences in recognition and measurement between statutory and regulatory financial accounts

#### 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.

#### 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.

#### Hafren Dyfrdwy Limited results

The acquisition of Hafren Dyfrdwy was completed in February 2017 and the full year results are included in the Severn Trent Water Group results in 2017/18. The Hafren Dyfrdwy entity results and related consolidation entries are excluded from the regulatory accounts.

### Discontinued operations

The disposal of our Non-Household Retail activities to Water Plus, our joint venture with United Utilities was completed on 1 June 2016. Operating costs relating to legacy bad debt expense have been reported as discontinued operations in the statutory accounts. These have been reflected in the differences between statutory and RAG definitions adjustment as the regulatory income statement does not have a line item to record discontinued operations.

### Differences in presentation between statutory and regulatory financial accounts

#### 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.

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

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. In addition, 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.

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.

### 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 tables presented in section 2 of the Annual Performance Report have been prepared in accordance with our Accounting Separation Methodology Statement which can be found at [stwater.co.uk](http://stwater.co.uk). The 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

### 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 Strategic Report of the consolidated Severn Trent Water Limited Annual Report and Accounts 2018 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.

### Revenue recognition

Turnover represents income receivable from regulated water and waste water activities, excluding value added tax.

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.

### Bad debts

Provisions are charged to operating costs to reflect the company's assessment of the risk of non-recoverability of debtors. Provisions are calculated based on the age of the debtor balance and the company's previous collection experience for balances of that age. The bad debt provisioning rates are updated annually to reflect the latest collection performance data from the company's billing system. Write-offs in relation to court or debt recovery costs are not included.

The company's bad debt write off policy has remained unchanged and has been consistently applied in the current and the prior years.

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.

### Other accounting policies

All other accounting policies applied to the regulatory financial reporting accounts are set out in pages 110-116 of the consolidated Severn Trent Water Limited Annual Report and Accounts 2018, 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.

### 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.

## 3. Statement of directors' remuneration and standards of performance

Information regarding Directors' Remuneration can be found on pages 80-86 of the Severn Trent Water Limited Annual Report and Accounts 2018, including details of the link to performance, how remuneration was calculated and details of amounts paid. Further details in relation to outcomes against performance commitments are detailed in Section 3.

# Section 2

Price control  
and additional  
segmental  
reporting

## Year ended 31 March 2018

[illegible]

# 2B - Totex analysis (wholesale)

Year ended 31 March 2018

Line description		Water Resources	Water Network+	Waste water Network+	Sludge	Total
		£m	£m	£m	£m	£m
<b>A Operating expenditure</b>						
2B.1	Power	4.2	46.5	41.2	(10.7)	81.2
2B.2	Income treated as negative expenditure	(0.3)	0.0	0.0	(18.7)	(19.0)
2B.3	Abstraction charges/ discharge consents	11.3	0.0	9.6	0.0	20.9
2B.4	Bulk supply/ Bulk discharge	9.0	3.1	0.0	0.0	12.1
2B.5	Other operating expenditure - renewals expensed in year (Infrastructure)	3.2	82.7	48.5	0.0	134.4
2B.6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	0.0	0.2	1.5	0.0	1.7
2B.7	Other operating expenditure - excluding renewals	14.6	141.9	112.9	48.9	318.3
2B.8	Local authority and Cumulo rates	2.1	47.2	23.2	5.0	77.5
<b>2B.9</b>	<b>Total operating expenditure excluding third party services</b>	<b>44.1</b>	<b>321.6</b>	<b>236.9</b>	<b>24.5</b>	<b>627.1</b>
2B.10	Third party services	2.6	2.8	0.4	0.0	5.8
<b>2B.11</b>	<b>Total operating expenditure</b>	<b>46.7</b>	<b>324.4</b>	<b>237.3</b>	<b>24.5</b>	<b>632.9</b>
<b>B Capital Expenditure</b>						
2B.12	Maintaining the long term capability of the assets - infra	0.0	0.0	0.0	0.0	0.0
2B.13	Maintaining the long term capability of the assets - non- infra	13.4	127.7	92.8	54.4	288.3
2B.14	Other capital expenditure - infra	8.5	78.7	57.5	0.0	144.7
2B.15	Other capital expenditure - non-infra	17.4	67.3	81.6	1.8	168.1
2B.16	Infrastructure network reinforcement	0.0	8.1	3.0	0.0	11.1
<b>2B.17</b>	<b>Total gross capital expenditure excluding third party services</b>	<b>39.3</b>	<b>281.8</b>	<b>234.9</b>	<b>56.2</b>	<b>612.2</b>
2B.18	Third party services	0.0	0.0	0.0	0.0	0.0
<b>2B.19</b>	<b>Total gross capital expenditure</b>	<b>39.3</b>	<b>281.8</b>	<b>234.9</b>	<b>56.2</b>	<b>612.2</b>
<b>C Grants and contributions</b>						
2B.20	Grants and contributions	(0.2)	(23.2)	(13.4)	0.0	(36.8)
<b>2B.21</b>	<b>Totex</b>	<b>85.8</b>	<b>583.0</b>	<b>458.8</b>	<b>80.7</b>	<b>1208.3</b>
<b>D Cash Expenditure</b>						
2B.22	Pension deficit recovery payments	1.8	13.4	8.9	2.6	26.7
2B.23	Other cash items	0.0	0.0	0.0	0.0	0.0
<b>E Total</b>						
<b>2B.24</b>	<b>Totex including cash items</b>	<b>87.6</b>	<b>596.4</b>	<b>467.7</b>	<b>83.3</b>	<b>1235.0</b>

The Wholesale share of an exceptional pension gain relating to a Pension Increase Exchange arrangement of £3.4m and £2.6m for Water and Waste Water respectively is included in other operating expenditure. This is subsequently excluded in the Wholesale totex analysis (Table 4B).

# 2C - Operating costs analysis (retail)

Year ended 31 March 2018

Line description	Household	Non-household	Total
	£m	£m	£m
<b>Operating expenditure</b>			
2C.1 Customer services	32.1	0.1	32.2
2C.2 Debt management	12.0	0.0	12.0
2C.3 Doubtful debts	25.0	1.5	26.5
2C.4 Meter reading	4.6	0.0	4.6
2C.5 Services to developers		2.4	2.4
2C.6 Other operating expenditure	15.3	1.2	16.5
2C.7 Total operating expenditure excluding third party services	89.0	5.2	94.2
2C.8 Third party services operating expenditure	0.0	0.0	0.0
<b>2C.9 Total operating expenditure</b>	<b>89.0</b>	<b>5.2</b>	<b>94.2</b>
2C.10 Depreciation - tangible fixed assets	3.3	0.0	3.3
2C.11 Amortisation - intangible fixed assets	1.7	0.0	1.7
<b>2C.12 Total operating costs</b>	<b>94.0</b>	<b>5.2</b>	<b>99.2</b>
2C.13 Debt written off	20.7	0.0	20.7

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

## Household

Retail household total operating costs of £94.0m are £14.5m (13.4%) lower than the previous Final Determination (FD). Please note we have allocated the FD overall costs based on our planned spend areas where this was not specifically done in the FD.

On 1 June 2016 we completed the disposal of our Non-Household Retail activities to Water Plus, our joint venture with United Utilities in preparation for the opening of the non-household retail market on 1 April 2017. This has resulted in a stranded cost impact within Household which would not have been incorporated in the original FD.

## Customer services

Customer services costs of £32.1m are £2.7m (9.2%) adverse to the FD. The split of the household and non-household operations remains the main cause of this variance. Whereas previously the shared costs of the customer service were shared in support of both operations, these are now all in support of household operations. These stranded cost elements are having an adverse cost impact, and would not have been foreseen and planned in the original FD.

Vulnerable customer incentives are £1.1m (91.7%) 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.

This year also saw the introduction of a Customer Communications team to provide retail customers updates on operations, resulting in an additional cost to Network Customer Enquiries.

## Debt management

Debt management costs of £12.0m are £2.2m (-22.4%) adverse to the FD.

A refinement in allocation between debt management and payment handling within credit services teams carried out last year resulted in a reduced amount allocated to Debt management, as certain costs have been allocated to Customer service, resulting in a favourable variance of £1.3m to the FD.

The favourable variance generated by previous years allocation change has been offset by a £3.3m reclassification into Debt Management for write offs of court costs and additional recovery costs added to customers' bills.

A further adverse variance is driven by an intentional strategic shift from court activity to other debt recovery channels i.e. debt collection agencies.



## Doubtful debts

Doubtful debt costs of £25.0m are £6.9m (21.6%) favourable to the FD. The FD assumes bad debt costs of 2.7% of revenue compared to actual bad debt costs of 2.2% of revenue. The improvement is being driven by improved collection performance versus the expectation in the FD.

## Meter reading

Meter reading costs of £4.6m are £1.1m (19.3%) 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 £15.3m is £12.4m (44.8%) favourable to the FD.

A change in company policy in June 2015 on customer side leaks, whereby the company no longer repairs leaks without charge, has resulted in costs £3.0m lower than the FD. This change of policy was not expected as part of the original FD.

Demand side water efficiency is £0.5m adverse as a result of an increased efficiency activities.

General and support costs across all functions are £7.3m (35.3%) 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.

An exceptional gain of £1.8 million arose from the net benefit, after implementation costs, of a Pension Increase Exchange arrangement under which members of the defined benefit schemes will be offered the opportunity at retirement to exchange future non-statutory inflationary increases in a portion of their pensions earned prior to 1997 for a higher pension payment now. In the prior year an exceptional gain of £2.6m arose from a similar exercise for existing pensioners. Whilst the table above includes the gain, we have adjusted the retail operating costs in the RoRE calculation so that the variance to FD excludes the impact of the gain.

## Depreciation

Depreciation charges of £5.0m are £1.0m (25.0%) 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 £5.2m are £12.7m (70.9%) 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 and include:

- 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).

General and support expenditure in relation to the above activities are also charged to the non-household price control.

# 2D - Historic cost analysis of fixed assets

Year ended 31 March 2018

Line description		Wholesale			Retail			Total
		Water Resources	Water Network+	Waste water Network+	Sludge	Household	Non-Household	
		£m	£m	£m	£m	£m	£m	
<b>A Cost</b>								
2D.1	At 1 April 2017	312.2	5042.6	6456.9	598.7	436.9	0.0	12847.3
2D.2	Disposals	(0.1)	(11.1)	(5.0)	(0.6)	0.0	0.0	(16.8)
2D.3	Additions	39.3	271.5	235.0	56.1	1.2	0.0	603.1
2D.4	Adjustments	21.1	289.1	(50.0)	135.6	(395.8)	0.0	0.0
2D.5	Assets adopted at nil cost	0.0	0.0	35.6	0.0	0.0	0.0	35.6
2D.6	At 31 March 2018	372.5	5592.1	6672.5	789.8	42.3	0.0	13469.2
<b>B Depreciation</b>								
2D.7	At 1 April 2017	(177.5)	(1736.7)	(2409.8)	(422.6)	(313.7)	0.0	(5060.3)
2D.8	Disposals	0.1	10.7	4.2	0.6	0.0	0.0	15.6
2D.9	Adjustments	52.6	(281.0)	(140.2)	76.3	292.3	0.0	0.0
2D.10	Charge for the year	(8.3)	(114.5)	(143.3)	(40.7)	(3.3)	0.0	(310.1)
2D.11	At 31 March 2018	(133.1)	(2121.5)	(2689.1)	(386.4)	(24.7)	0.0	(5354.8)
2D.12	Net book amount at 31 March 2018	239.4	3470.6	3983.4	403.4	17.6	0.0	8114.4
2D.13	Net book amount at 1 April 2017	134.7	3305.9	4047.1	176.1	123.2	0.0	7787.0
<b>D Depreciation charge for year</b>								
2D.14	Principal services	(8.3)	(114.5)	(143.3)	(40.7)	(3.3)	(0.0)	(310.1)
2D.15	Third party services	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2D.16	<b>Total</b>	<b>(8.3)</b>	<b>(114.5)</b>	<b>(143.3)</b>	<b>(40.7)</b>	<b>(3.3)</b>	<b>0.0</b>	<b>(310.1)</b>

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

Year ended 31 March 2018

Line description	Fully recognised in income statement	Current year		Total
		Capitalised and amortised (in income statement)	Fully netted off capex	
	£m	£m	£m	£m
<b>A Grants and contributions - water</b>				
2E.1 Connection charges (s45)	0.0	12.1	0.0	12.1
2E.2 Infrastructure charge receipts (s146)	0.0	10.3	0.0	10.3
2E.3 Requisitioned mains (s43, s55 & s56)	0.0	0.6	0.0	0.6
2E.4 Other contributions (price control)	0.0	0.0	0.0	0.0
2E.5 Diversions (s185)	7.4	0.0	0.0	7.4
2E.6 Other contributions (non-price control)	0.0	0.4	0.0	0.4
<b>2E.7 Total</b>	<b>7.4</b>	<b>23.4</b>	<b>0.0</b>	<b>30.8</b>
2E.8 Value of adopted assets		0.0		0.0
<b>B Grants and contributions - waste water</b>				
2E.9 Infrastructure charge receipts (s146)	0.0	9.6	0.0	9.6
2E.10 Requisitioned sewers (s100)	0.0	0.4	0.0	0.4
2E.11 Other contributions (price control)	0.0	0.0	0.0	0.0
2E.12 Diversions (s185)	2.1	0.0	0.0	2.1
2E.13 Other contributions (non-price control)	0.0	3.4	0.0	3.4
<b>2E.14 Total</b>	<b>2.1</b>	<b>13.4</b>	<b>0.0</b>	<b>15.5</b>
2E.15 Value of adopted assets		35.6		35.6
		Current year		Total
		Water £m	Waste water £m	
<b>C Movements in capitalised grants and contributions</b>				
2E.16 Brought forward		420.9	253.5	674.4
2E.17 Capitalised in year		23.4	13.4	36.8
2E.18 Amortisation (in income statement)		(5.7)	(3.6)	(9.3)
2E.19 Carried forward		438.6	263.3	701.9
<b>D Land sales</b>				
2E.20 Proceeds from disposals of protected land		3.3	1.6	4.9

## 2F - Household revenues by customer type

Year ended 31 March 2018

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	22.208	1.996	24.204	124.708	16.01
2F.2	Unmeasured waste water only customer	68.987	8.189	77.176	526.620	15.55
2F.3	Unmeasured water and waste water customer	544.305	52.148	596.453	1631.208	31.97
2F.4	Measured water only customer	19.763	2.607	22.370	125.135	20.83
2F.5	Measured waste water only customer	36.049	4.860	40.909	276.860	17.55
2F.6	Measured water and waste water customer	344.537	51.329	395.866	1335.337	38.44
<b>2F.7</b>	<b>Total</b>	<b>1035.849</b>	<b>121.129</b>	<b>1156.978</b>	<b>4019.868</b>	<b>30.13</b>

# 2G - Non-household water revenues by customer type

Year ended 31 March 2018

Line description		Wholesale charges revenue	Retail revenue	Total revenue	Number of connections	Average non-household retail revenue per connection
		£m	£m	£m	000s	£
<b>A Non-Default tariffs</b>						
<b>2G.1</b>	<b>Total non-default tariffs</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
<b>B Default tariffs</b>						
2G.2		0.0	0.0	0.0	0.0	0
2G.3		0.0	0.0	0.0	0.0	0
2G.4		0.0	0.0	0.0	0.0	0
2G.5		0.0	0.0	0.0	0.0	0
2G.6		0.0	0.0	0.0	0.0	0
2G.7		0.0	0.0	0.0	0.0	0
2G.8		0.0	0.0	0.0	0.0	0
2G.9		0.0	0.0	0.0	0.0	0
2G.10		0.0	0.0	0.0	0.0	0
2G.11		0.0	0.0	0.0	0.0	0
2G.12		0.0	0.0	0.0	0.0	0
2G.13		0.0	0.0	0.0	0.0	0
2G.14		0.0	0.0	0.0	0.0	0
2G.15		0.0	0.0	0.0	0.0	0
2G.16		0.0	0.0	0.0	0.0	0
2G.17		0.0	0.0	0.0	0.0	0
2G.18		0.0	0.0	0.0	0.0	0
2G.19		0.0	0.0	0.0	0.0	0
2G.20		0.0	0.0	0.0	0.0	0
<b>2G.21</b>	<b>Total default tariffs</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
<b>2G.22</b>	<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
<b>C Revenue per customer</b>						
<b>2G.23</b>	<b>Total</b>				<b>0.0</b>	<b>0</b>

Number of customers  
Average non-household retail revenue per customer  
000s £

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 2018

Line description	Wholesale charges revenue	Retail revenue	Total revenue	Number of connections	Average non-household retail revenue per connection
	£m	£m	£m	000s	£
<b>A Non-Default tariffs</b>					
<b>2H.1 Total non-default tariffs</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
<b>B Default tariffs</b>					
2H.2	0.0	0.0	0.0	0.0	0
2H.3	0.0	0.0	0.0	0.0	0
2H.4	0.0	0.0	0.0	0.0	0
2H.5	0.0	0.0	0.0	0.0	0
2H.6	0.0	0.0	0.0	0.0	0
2H.7	0.0	0.0	0.0	0.0	0
2H.8	0.0	0.0	0.0	0.0	0
2H.9	0.0	0.0	0.0	0.0	0
2H.10	0.0	0.0	0.0	0.0	0
2H.11	0.0	0.0	0.0	0.0	0
2H.12	0.0	0.0	0.0	0.0	0
2H.13	0.0	0.0	0.0	0.0	0
2H.14	0.0	0.0	0.0	0.0	0
2H.15	0.0	0.0	0.0	0.0	0
2H.16	0.0	0.0	0.0	0.0	0
2H.17	0.0	0.0	0.0	0.0	0
2H.18	0.0	0.0	0.0	0.0	0
2H.19	0.0	0.0	0.0	0.0	0
2H.20	0.0	0.0	0.0	0.0	0
2H.21	0.0	0.0	0.0	0.0	0
2H.22	0.0	0.0	0.0	0.0	0
2H.23	0.0	0.0	0.0	0.0	0
<b>2H.24 Total default tariffs</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
<b>2H.25 Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0</b>
				Number of customers	Average non-household retail revenue per customer
				000s	£
<b>C Revenue per customer</b>					
<b>2H.26 Total</b>				<b>0.0</b>	<b>0</b>

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 2018

Line description		Household £m	Non-household £m	Total £m
<b>A Wholesale charge - water</b>				
2I.1	Unmeasured	302.2	2.8	305.0
2I.2	Measured	198.9	154.0	352.9
2I.3	Third party revenue	0.0	0.0	0.0
2I.4	Total	501.1	156.8	657.9
<b>B Wholesale charge - waste water</b>				
2I.5	Unmeasured	333.3	4.3	337.6
2I.6	Measured	201.4	210.4	411.8
2I.7	Third party revenue	0.0	0.0	0.0
2I.8	Total	534.7	214.7	749.4
<b>2I.9</b>	<b>Wholesale Total</b>	<b>1035.8</b>	<b>371.5</b>	<b>1407.3</b>
<b>C Retail revenue</b>				
2I.10	Unmeasured	62.3	0.0	62.3
2I.11	Measured	58.8	0.0	58.8
2I.12	Other third party revenue	0.0	2.2	2.2
<b>2I.13</b>	<b>Retail total</b>	<b>121.1</b>	<b>2.2</b>	<b>123.3</b>
<b>D Third party revenue - non-price control</b>				
2I.14	Bulk Supplies - water			5.0
2I.15	Bulk Supplies - waste water			0.0
2I.16	Other third party revenue			10.3
<b>E Principal services - non-price control</b>				
2I.17	Other appointed revenue			3.1
<b>2I.18</b>	<b>Total appointed revenue</b>			<b>1549.0</b>
		Water £m	Waste water £m	Total £m
2I.19	Wholesale revenue governed by price control	657.9	749.4	1407.3
2I.20	Grants & contributions	23.0	10.0	33.0
<b>2I.21</b>	<b>Total revenue governed by wholesale price control</b>	<b>680.9</b>	<b>759.4</b>	<b>1440.3</b>
2I.22	Amount assumed in wholesale determination	693.6	743.4	1437.0
2I.23	Adjustment for in-period ODI revenue	(1.3)	26.6	25.3
2I.24	Adjustment for WRFIM	(17.7)	(6.8)	(24.5)
<b>2I.25</b>	<b>Total assumed revenue</b>	<b>674.6</b>	<b>763.2</b>	<b>1437.8</b>
<b>2I.26</b>	<b>Difference</b>	<b>6.3</b>	<b>-3.8</b>	<b>2.5</b>



## 2I - Revenue analysis and wholesale control reconciliation

Year ended 31 March 2018

### Difference between allowed and actual revenue under the wholesale control

Wholesale revenue for 2017/18 of £1,440.3m is £2.5m (0.2%) higher than the amount assumed in the Wholesale Price Control.

### Wholesale Water

Wholesale Water revenue of £680.9m is £6.3m (0.9%) higher than the Wholesale Price Control. The main variances are as follows:

Core tariff revenue is in line at £1.4m (0.2%) lower than the Wholesale Price Control.

Net Wholesale Water capital revenue is £7.7m higher than the Wholesale Price Control. This is due to requisition income of £0.6m omitted from the Wholesale Price Control, s146 infrastructure charges £5.8m higher and new connections revenue £1.3m higher.

### Wholesale Waste

Wholesale Waste revenue of £759.4m is £3.8m (0.5%) lower than the Wholesale Price Control. The main variances are as follows:

Core tariff revenue is £9.5m (1.3%) lower than the Wholesale Price Control, mainly due to actual

property volumes lower than forecast for unmeasured waste, plus an increase in the amount of customers helped through our Social Tariff scheme.

Net wholesale waste capital revenue is £5.7m higher than the Wholesale Price Control. £5.3m is due to higher than expected infrastructure charges, plus requisition income of £0.4m omitted from the Wholesale Price Control.

## 2J - Infrastructure network reinforcement costs

Line description		Network reinforcement capex	On site/site specific capex (memo only)
		£m	£m
<b>A Wholesale water network+ (treated water distribution)</b>			
2J.1	Distribution and trunk mains	6.1	39.5
2J.2	Pumping and storage facilities	2.0	0.0
2J.3	Other	0.0	0.0
<b>2J.4</b>	<b>Total</b>	<b>8.1</b>	<b>39.5</b>
<b>B Wholesale wastewater network+ (sewage collection)</b>			
2J.5	Foul and combined systems	1.9	2.7
2J.6	Surface water only systems	0.1	0.2
2J.7	Pumping and storage facilities	1.0	0.0
2J.8	Other	0.0	0.0
<b>2J.9</b>	<b>Total</b>	<b>3.0</b>	<b>2.9</b>

# Section 3

## Performance summary

We've summarised our 45 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:

<p>Service now - Waste</p> <p>£86m outperformance payment</p>	<p>Asset health</p> <p>£1m underperformance penalty</p>	<p>Resilience</p>	<p>Environment</p> <p>£2m outperformance payment</p>
<p>Service now - Water</p> <p>£22m underperformance penalty</p>	<p>Service now - Retail</p>	<p>Serving our community</p>	<p>Responsible, efficient investment</p>

# 3A - Outcome Performance Table

Row	Unique ID	Performance commitment	Unit
1	PR14SVTWSW_W-A1	W-A1: Number of complaints about drinking water quality	nr
2	PR14SVTWSW_W-A2	W-A2: Compliance with drinking water quality standards	%
3	PR14SVTWSW_W-A3	W-A3: Asset stewardship - number of sites with coliform failures (WTWs)	nr
4	PR14SVTWSW_W-A4	W-A4: Number of successful catchment management schemes	nr
5	PR14SVTWSW_W-B1	W-B1: Resource efficiency (distribution input per customer) - amount of water taken out of the environment	nr
6	PR14SVTWSW_W-B2	W-B2: Leakage levels	nr
7	PR14SVTWSW_W-B3	W-B3: Speed of response in repairing leaks [% fixed within 24 hours]	%
8	PR14SVTWSW_W-B4	W-B4: Number of minutes customers go without supply each year (interruptions to supply > 3 hours)	time
9	PR14SVTWSW_W-B5	W-B5: % of customers with resilient supplies (those that benefit from a second source of supply)	%
10	PR14SVTWSW_W-B6	W-B6: Asset stewardship - mains bursts	nr
11	PR14SVTWSW_W-B7	W-B7: Customers at risk of low pressure	nr
12	PR14SVTWSW_W-B8	W-B8: Restrictions on water use	nr
13	PR14SVTWSW_W-B9	W-B9: Timing delays on Birmingham resilience scheme	text
14	PR14SVTWSW_W-B10	W-B10: Non-delivery of the outcome of the Birmingham resilience scheme	text
15	PR14SVTWSW_W-B11	W-B11: Timing delays on community risk schemes	text
16	PR14SVTWSW_W-B12	W-B12: Non-delivery of the community risk schemes	text
17	PR14SVTWSW_W-B13	W-B13: Timing delays on Elan Valley Aqueduct (EVA) maintenance	text
18	PR14SVTWSW_W-B14	W-B14: Non-delivery of the Elan Valley Aqueduct (EVA) maintenance	text
19	PR14SVTWSW_W-C1	W-C1: Customers rating our services as good value for money (based on tracker survey)	%
20	PR14SVTWSW_W-D1	W-D1: Improvements in river water quality against WFD criteria	nr
21	PR14SVTWSW_W-D2	W-D2: Asset stewardship - environmental compliance	%
22	PR14SVTWSW_W-D3	W-D3: Biodiversity	nr
23	PR14SVTWSW_W-D4	W-D4: Sites with eel protection at intakes	nr
24	PR14SVTWSW_W-E1	W-E1: Size of our carbon footprint	nr
25	PR14SVTWSW_W-F1	W-F1: Improved understanding of our services through education	nr
26	PR14SVTWSWW_S-A1	S-A1: Number of internal sewer flooding incidents	nr
27	PR14SVTWSWW_S-A2	S-A2: Number of external sewer flooding incidents	nr
28	PR14SVTWSWW_S-A3	S-A3: Partnership working	nr
29	PR14SVTWSWW_S-A4	S-A4: Asset stewardship - blockages	nr
30	PR14SVTWSWW_S-A5	S-A5: Statutory obligations (Section 101A schemes)	nr
31	PR14SVTWSWW_S-B1	S-B1: Customers rating our services as good value for money (based on tracker survey)	%
32	PR14SVTWSWW_S-C1	S-C1: Improvements in river water quality against WFD criteria	nr
33	PR14SVTWSWW_S-C2	S-C2: The number of category 3 pollution incidents	nr
34	PR14SVTWSWW_S-C3	S-C3: Asset stewardship - environmental compliance (basket of measures)	%
35	PR14SVTWSWW_S-C4	S-C4: Biodiversity	nr
36	PR14SVTWSWW_S-C5	S-C5: Sustainable sewage treatment	nr
37	PR14SVTWSWW_S-C6	S-C6: Serious pollution incidents	nr
38	PR14SVTWSWW_S-C7	S-C7: Overall environmental performance (basket of environmental measures)	nr
39	PR14SVTWSWW_S-C8	S-C8: The number of category 4 pollution incidents	nr
40	PR14SVTWSWW_S-D1	S-D1: Size of our carbon footprint	nr
41	PR14SVTWSWW_S-E1	S-E1: Improved understanding of our services through education	nr
42	PR14SVTHHR_R-A1	R-A1: Customer satisfaction with their service (based on a survey)	text
43	PR14SVTHHR_R-A2	R-A2: Customers' experience of dealing with us (based on Ofwat's SIM)	text
44	PR14SVTHHR_R-B1	R-B1: Customers helped by a review of their tariff & water usage &/or supported by SVT social fund	nr
45	PR14SVTHHR_R-B2	R-B2: Percentage of customers who do not pay (household bad debt divided by total household revenue)	%

Unit description	Decimal places	2016-17 performance level - actual (for information)	2017-18 performance level - actual	2017-18 CPL met?	2017-18 outperformance payment or underperformance penalty - in-period ODIs (indicator)	2017-18 outperformance payment or underperformance penalty - in-period ODIs (£m, to 4 dp)
No. of water quality complaints	0	14461	12687	No	Underperformance penalty	-2.4255
Mean zonal compliance (%)	3	99.944	99.96	No	Underperformance penalty deadband	0.0000
No. of sites with coliform failures per year	0	5	8	No	Underperformance penalty	-0.4630
No. catchment management schemes	0	0	0	-	-	0.0000
Litres per person per day (l/p/d)	0	236	235	No	-	0.0000
Megalitres per day (ML/d)	0	432	443	No	Underperformance penalty	-1.1070
% visible leaks fixed within 24 hours	0	33	23	No	Underperformance penalty	-1.4058
Minutes/property/year	2	10.13	34.29	No	Underperformance penalty	-24.5190
% customers with 2nd supply source	1	77	77.4	-	-	0.0000
No. of burst mains per year	0	5173	5825	Yes	Outperformance payment deadband	0.0000
No. customers at risk of low pressure	0	187	204	Yes	Outperformance payment	0.0363
No. water restrictions in five-year period	0	0	0	Yes	-	0.0000
Scheme delivery (3 components)	na	On track	On track	Yes	-	0.0000
Scheme delivery (3 components)	na	On track	On track	Yes	-	0.0000
Scheme delivery (3 components)	na	On track	On track	Yes	-	0.0000
Scheme delivery (3 components)	na	On track	On track	Yes	-	0.0000
Scheme delivery	na	Milestone complete	Milestone complete	Yes	-	0.0000
Scheme delivery	na	Milestone complete	Milestone complete	Yes	-	0.0000
% customer satisfaction	0	58	59	Yes	Outperformance payment deadband	0.0000
No. WFD classification improvements	0	7	3	-	-	0.0000
% environmental compliance	0	98.0	97.7	No	-	0.0000
No. of hectares improved	0	293	337	-	-	0.0000
No. sites with eel protection at intakes	0	0	0	-	-	0.0000
ktCO2e	3	250	256	No	Underperformance penalty	-0.4827
No. of people - education programme	0	167024	200536	Yes	-	0.0000
No. of internal sewer flooding incidents	0	901	662	Yes	Outperformance payment	12.7604
No. of external sewer flooding incidents	0	5801	3763	Yes	Outperformance payment	72.8658
No. of partnership working projects	0	0	8	-	-	0.0000
No. of sewer blockages per year	0	45240	45401	Yes	Outperformance payment deadband	0.0000
No. of connectable properties, identified as polluting or likely to pollute, associated with new Section 101A schemes	0	14	32	-	-	0.0000
% customer satisfaction	0	58	59	Yes	Outperformance payment deadband	0.0000
No. of WFD classification improvements	0	8	16	-	-	0.0000
No. of pollution incidents (cat 3)	0	301	327	Yes	Outperformance payment	2.5333
% compliance with WwTW regulations	2	98.0	97.67	No	Underperformance penalty deadband	0.0000
No. of hectares improved	0	293	337	-	-	0.0000
No. of WwTWs avoiding investment	0	0	0	-	-	0.0000
No. of pollution incidents (cats 1 and 2)	0	7	2	Yes	-	0.0000
No. of environmental targets met	0	Cannot be calculated until APR19	0	-	-	0.0000
No. of pollution incidents (cat 4)	0	239	157	Yes	-	0.0000
ktCO2e	3	207	205.816	Yes	Outperformance payment	0.0439
No. of people - education programme	0	167024	200536	Yes	-	0.0000
Customer satisfaction ranking	na	Median	Upper quartile	Yes	-	0.0000
Service incentive mechanism (SIM) score ranking	na	83.61	83.2	-	-	0.0000
No. of customers engaged with on debt	0	50903	51652	Yes	-	0.0000
% of customers who do not pay	2	1.8	2.20	Yes	-	0.0000

## 3B - Sub-measures performance table

Row	Unique ID	PC/sub-measure ID	PC/sub-measure	2016-17 performance level - actual	2017-18 performance level - actual	2017-18 CPL met?
1	PR14SVTWSWW_S-C3	00	S-C3: Asset stewardship - environmental compliance (basket of measures)	97.99%	97.67%	No
2	PR14SVTWSWW_S-C3	01	% of sewage treatment works passing their numeric consents	99.86%	99.86%	No
3	PR14SVTWSWW_S-C3	02	% of actions raised from EA regulatory site audits (actions raised as a % of total site visits)	97.87%	97%	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	94.23%	93.85%	No
5	PR14SVTWSWW_S-C3	04	% of sites compliant with their abstraction permits	99.99%	100.00%	Yes
6	PR14SVTWSWW_S-C7	00	S-C7: Overall environmental performance (basket of environmental measures)	Can't be calculated until APR19	0	-
7	PR14SVTWSWW_S-C7	01	Improvements in river water quality against WFD criteria	Can't be calculated until APR19	0	-
8	PR14SVTWSWW_S-C7	02	Asset stewardship - environmental compliance	Can't be calculated until APR19	0	-
9	PR14SVTWSWW_S-C7	03	Total number of category 1, 2, and 3 pollution incidents	Can't be calculated until APR19	0	-
10	PR14SVTWSWW_S-C7	04	Biodiversity improvements	Can't be calculated until APR19	0	-

## 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
<b>A      Qualitative performance</b>		
3D.1	1st survey score	4.33
3D.2	2nd survey score	4.31
3D.3	3rd survey score	4.35
3D.4	4th survey score	4.34
3D.5	Qualitative SIM score (out of 75)	62.48
<b>B      Quantitative performance</b>		
3D.6	Total contact score	86.21
3D.7	Quantitative SIM score (out of 25)	20.69
<b>C      SIM score</b>		
3D.8	Total annual SIM score (out of 100)	83.17

# Service Now - Waste

We've delivered another year of improvement on sewer flooding - one of the worst service failures that our customers could ever experience. We have exceeded both targets and expect to be ranked as one of the top performing companies - a performance which has earned an outperformance payment of £85.6m. There is room for improvement - we will continue to innovate, using leading edge technology and high quality data to identify areas at risk which we then address through targeted action. We've developed a range of solutions to use - from major investment schemes, quick to deploy mitigation measures and cost effective bespoke solutions for hard to resolve issues.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2016/17	2017/18	
SA1	Internal sewer flooding incidents	Number	901 (989)	662 (960)	£12.760m
SA2	External sewer flooding incidents	Number	5801 (7548)	3763 (7447)	£72.866m

## Sewer Flooding (Internal and External)

We've made significant improvements and have almost halved the number of external incidents in just two years and reduced the number of internal incidents to close to the industry frontier position.

### Drivers of performance

Key to our performance is the way we've combined high-quality data with expertise and insights. Improving our data analytics capabilities has allowed our experts to better understand the root cause of performance.

This approach has been taken across many of our performance areas with sewer flooding being our stand-out success story.

By overlaying known incidents with geospatial maps showing topography, population density and commercial use, we've been able to be more targeted in our proactive maintenance programmes and respond to potential incidents before they have occurred.

This analysis has also helped us identify clusters or hot-spots of external sewer flooding caused by debris, foreign objects or accumulation of fats, oils and greases in our network, which we

are then able address through targeted proactive maintenance, such as sewer jetting.

We can't always solve the problem straight away, so we're investing to provide some customers with 'super-mitigation' solutions; this gives them enhanced protection whilst we find the best long term, sustainable solution to the problem.

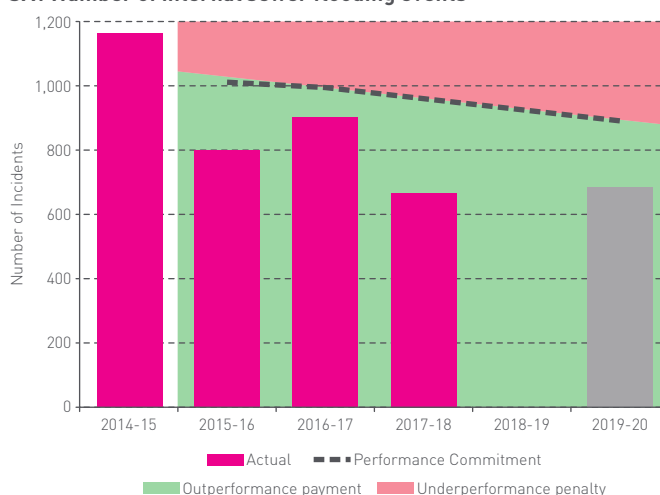
### Steps to Improve

All of our successes are underpinned by combining high-quality performance data alongside expertise and insights purely focussed on improving

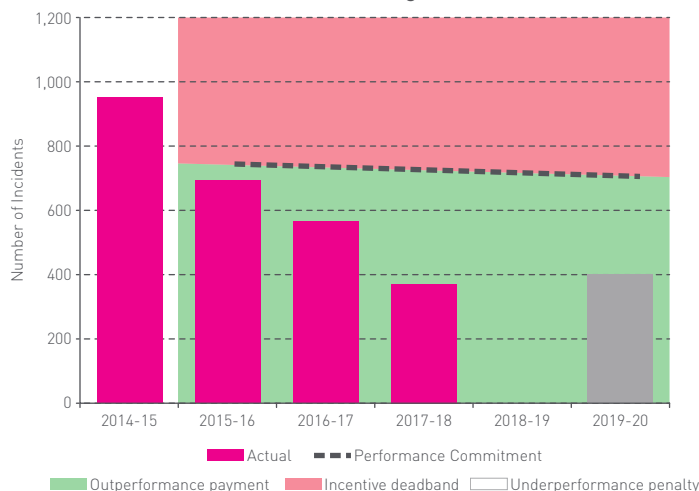
performance. It's an area that is still evolving and our target to improve our ability to predict and prevent repeat incidents.

We're also using our data in a more sophisticated way to identify areas most at risk of sewer flooding. As part of this we are developing the ability to overlay our flooding analysis alongside our priority services register and other guides of vulnerability, such as critical infrastructure like hospitals and schools, to understand whether our initiatives can be better targeted to support customers who are most at risk of service disruption.

SA1 Number of internal sewer flooding events





**SA2 - Number of external sewer flooding incidents**

A key tool supporting our work to reduce sewer flooding is our education programme where we encourage our customers to use the sewers responsibly. This year we educated over 200,000 consumers to reinforce this message (see more in the Serving Our Community section).

At the same time we're serious about tackling misuse of our sewers and, this year, have successfully prosecuted two food establishments for continually using the sewer network to dispose of fats, oils and greases.

We have also identified a potential to reduce incidents caused during proactive maintenance tasks, by increasing our operative's awareness, training and workmanship.

**Innovating to tackle fatbergs**

Fatbergs are a serious issue for us. They occur where our sewers are used for the disposal of fats, oils and greases (FOG) which solidify and build up in the sewer. They reduce how much sewage our sewers can take, increasing the risk that it will escape in to properties and open spaces.

Fatbergs start small and will build up over time if we take no action. This year we're trialling a great new product which can break down FOG in the sewers, causing it to dissolve harmlessly in to the sewage which is then treated at our works. This idea came about because of our relentless need to seek innovative solutions and look for new ideas outside of our own company. The idea of using a chemical actually came from a school visit. Early results from our trials are very encouraging.

**Future outlook**

We're on-track to be ahead of target on both internal and external sewer flooding for the two remaining years of the AMP.

# Service Now - Water

Customers expect water to be there when they need it. It's important to them that they can trust a lean, healthy supply of water that will always be there when they turn on the tap. We've improved our water quality compliance and delivered another strong year on low water pressure - an area increasingly of concern to our customers. We've also delivered sector leading improvement on water quality complaints, though we know there is much more to do to achieve target levels.

We have a strong track record and have shown great improvements in supply interruptions over the last five years, whilst we've met our leakage target for the last seven years. Disappointingly, the 'Beast from the East' in March 2018 resulted in us missing our leakage target and contributed to an already poor year on supply interruptions. And, whilst we respond to all customer reported leaks, we are struggling to do so within 24 hours in a way that is balanced and fair for all our customers.

Our performance across these measures has not been at the level our customers expect and, as such, we have incurred a significant penalty of £22.3m.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2016/17	2017/18	
WA1	Drinking water quality complaints	Number	14,461 (11,900)	12,687 9992	(£2.426)
WA2	Mean zonal compliance	Percentage	99.94% (99.97%)	99.96% (100%)	NIL
WB4	Number of minutes customers go without supply	Minutes	10.13 (12.20)	34.29 (9.60)	(£16.753)
WB2	Leakage	ML/day	432 (439)	443 (434)	(£1.722)
WB3	Speed of response to visible leaks	Percentage	33% (80%)	23% (90%)	(£1.406)

## Drinking water quality complaints and mean zonal compliance

### Drivers of performance

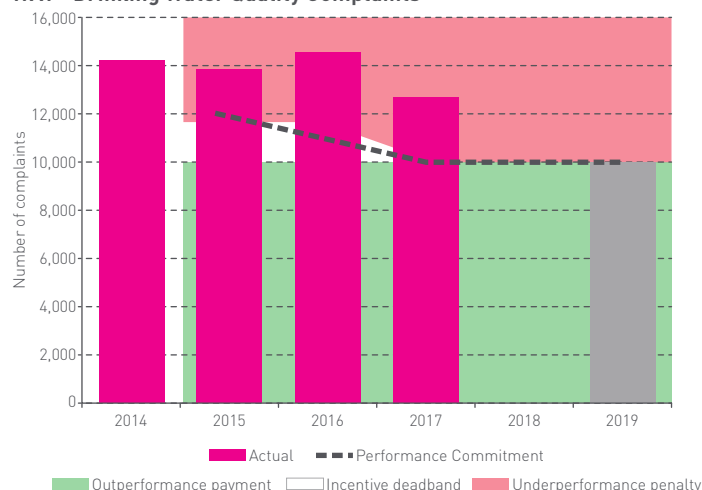
We've delivered a 12% year on year improvement in drinking water complaints, mainly due to better targeting of localised mains flushing programme and flushing of some key larger mains.

We've also seen continued success with our programme to prevent unauthorised access to our network by installing 70,000 hydrant locking caps. And we've continued to take action when unauthorised access occurs, prosecuting those who use unofficial standpipes to access our network.

Communication is also important so we have been more active in making sure our customers know about issues that could result in them experiencing problems, and providing advice on what they could do if they encounter murky or discoloured water.

Reducing the disturbance of our network has helped reduce mean zonal compliance failures driven by iron, turbidity and taste and odour with a 25% improvement in the total number of failures for these determinands.

WA1 - Drinking Water Quality Complaints



### Steps to Improve

We've made a significant improvement to performance but have to do more to meet the target by 2020. Alongside our accelerated flushing programmes we're investing to remove the issue at source wherever possible.

Our focus moving forward will be to optimise our manganese removal at some of our largest works before rolling out the protocols across the rest of our treatment assets. Initially we are prioritising improvements in our two counties responsible for the highest volume of complaints.

We will continue with our flushing and cleaning programmes for the remainder of this AMP to minimise the impact on customers. Whilst we recognise this increases our water in to supply, putting pressure on our resource efficiency and carbon emissions, we believe it is the right approach for customers.

To improve our mean zonal compliance targets we will continue our efforts to reduce lead including installing first time phosphorus dosing schemes and targeted replacement of both distribution and communication pipes.

We have rolled out a programme to replace our sample lines with copper taps to enable implementation of flaming as the standard method of disinfection.

### Future outlook

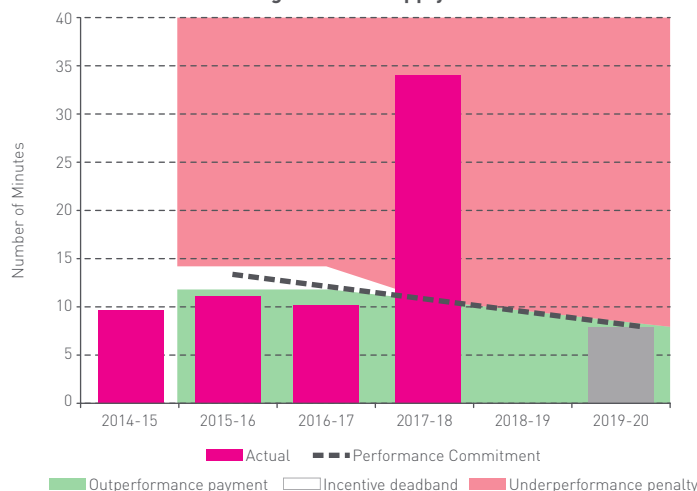
We're confident that our triple-track strategy of mains flushing and cleaning, proactive customer communications and clamping down on illegal usage will allow us to meet target levels for discolouration complaints by the end of AMP6.

We expect to remain within the agreed performance deadband range for mean zonal compliance for the remainder of AMP6.

WA2 - Drinking Water Quality Compliance



WB4 - Minutes customers go without supply



### Supply Interruptions

We've experienced an exceptionally bad year - the worst since this measure was introduced in 2012/13 - with the performance attributable to a very small number of large scale events throughout the year and culminating in the 'Beast from the East' in March 2018. We have not met the expectations of our customers and we are returning over £16m through underperformance penalties.

The operating conditions through the winter proved exceptionally difficult; the extreme cold conditions followed by rapid thawing caused an increase in mains bursts across our network

and the prevailing snow and ice hampered our ability to identify all of the burst pipes and effectively repair them.

We decided immediately to pay £30 compensation to any who were without water for more than 12 continuous hours, or experienced intermittent supply for more than 15 hours. We also worked with business customers and their retailers who were affected.

This one event alone contributed more than 11 minutes to our annual performance, this is more than our total annual supply interruptions reported in each of the last three years.

### Drivers of performance

How we respond to an incident is really important for our customers. We understand the impact even a short interruption event can have on their daily lives and our response has been a key focus for us this year.

We undertook an end-to-end review of the process which demonstrated we could do more to capture, embed and share lessons learned from each incident. Working with external experts, we've developed a database to capture this detail and enable us to internally benchmark our actual response to an incident against the hypothetical perfect response. This benchmarking enables us quantify the delay from each step of our response to understand how we can get better in future - vital for continuous improvement.

We've also developed our own Incident Tracker app allowing real time monitoring and updates of each incident through both an online portal and the mobile application. This has integrated all incident reporting in to a single system that is accessible easily, through multiple platforms, and provides all users with live updates during each incident.

### Steps to improve

Our focus continues to be on understanding our network better through the distribution of both permanent and temporary logging equipment. The more we understand our assets and how they are performing in real-time, the better we can adjust to potential issues and prevent our customers from noticing the impact.

We are continuing to innovate in how we use our existing technologies. It's been common practice for us to use drone technology to inspect our reservoirs and dams for a number of years; but this year we used them to help identify the location of a burst main in a particularly rural catchment that was also a floodplain. This significantly reduced the time needed to identify the exact location of the burst main. These sorts of improvements are vital given that our regions serves both the largest number of densely populated area and a high number of very rural areas.

We're also reviewing our approach to eruptive bursts (trickling leaks that eventually lead to a supply interruption event). We know that stabilising and improving the number of eruptive bursts that occur is key to enable us to make the next step change in supply interruptions and minimise the impact on customers.

And for our customers that live in the north west of our region, we're working with our neighbours at United Utilities to integrate elements of our network control processes where this can jointly benefit our customers. We recognise that its customers that matter, not where our company border ends.

Our activities to reduce leakage, through reducing and stabilising pressure, will also benefit supply interruption incidents. We're also increasing our mains replacement programme for the remaining two years of the AMP period.

### Future outlook

We expect to be back on target next year and for the remainder of AMP6.

### Leakage

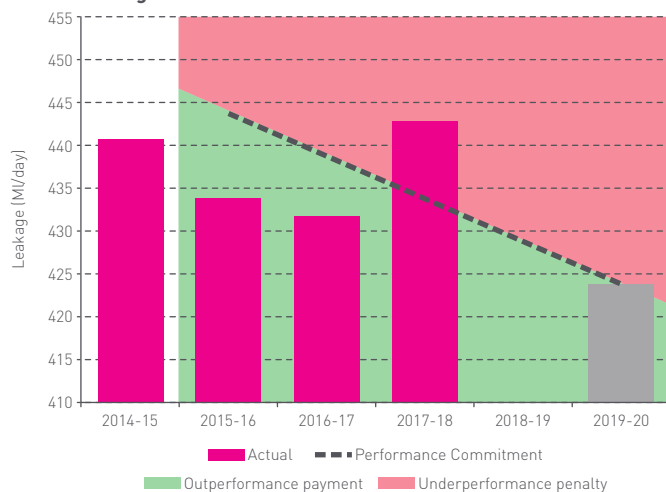
Leakage is a key priority for our customers. We were on track to deliver our target for most of the year, but the March 2018 freeze-thaw event that badly affected our supply interruptions performance also meant we missed our leakage target. This was particularly disappointing following our strong track record on leakage. As a result of our performance, we'll be returning £0.8m through an underperformance penalty.

Our customers need to be able to trust that we will do the right thing and act in their best interests. As such, we've also including an additional £0.8m underperformance penalty to reflect the increase in real leakage losses in 2016/17. We know we're not required to do this - we were actually ahead of target last year - but we have chosen to do so because we want to ensure our customers have trust and confidence that we will always do the right thing for them whilst at the same time supporting Ofwat's vision for the future of leakage.

Leakage movement over the last 12 months

2016/17 outturn	432 ML/day
Unaccounted for water change	+7 ML/day
Data improvements	+7 ML/day
Methodological change	-3 ML/day
2017/18 outturn	443 ML/day
2017/18 target	434 ML/day

WB2 - Leakage



### Drivers of performance

Monitoring and control of our network to pinpoint failure early and minimise customer impacts is key to driving down leakage in a cost effective way. We've invested in a wide range of tools including developing leakage detector robots, trialling a number of tools to identify which provide the most effective intelligence on our network and learning from world leaders.

Pressure within the network is a key driver of pipe bursts and leakage so we're looking at ways to reduce the pressure through 200 pressure release valves and installation of a further 84 valves at targeted locations.

In addition, we've been trialling permanently installed acoustic loggers in our Derby region. The initial trial in three district metered areas has been successful at identifying and locating leaks faster than traditional methods, and we're now looking to roll this out further.

We've also benefitted from installing smarter meters at residential properties which enable us to respond more quickly to potential private leakage incidents as the telemetry provides us with a more sophisticated and immediate understanding of water use in our network.

### Steps to Improve

This year we have decided to reduce our payments to our investors and instead, we've earmarked an additional £100 million to be reinvested back into our water business. Some of this will be used to invest in new fixed acoustics and pressure loggers across our network at strategic points, purchase additional satellite 'leakage tiles', harness new programming functionality in our outstations to detect flat-lining in our DSRs, trial 3 new trunk main monitoring solutions for early leak detection and accelerating the roll out of advanced pressure control systems.

We're also working with research institutions to improve our knowledge of pressure transients - short lived pressure waves in our network - and in partnership with Inflowmatix (Imperial College London) to predict pipe failure rates. The results of this work will enable us to identify the causes of pressure transients and prioritise investment by severity.

Underlying the investment is our commitment to ensure we can quickly and effectively respond to issues appropriately and empathetically. The creation of a high quality training centre for our workforce will provide state

of the art facilities for learning and will enable us to undertake scenario planning alongside the other organisations we'd be working with in the event of a failure. We'll review our tankering and continuous supplies provision to ensure that it meets our customers' expectations for continuous supplies.

We're also taking a companywide approach to meeting the leakage challenges of the future. This was initiated by our 'Bike on a Boat Tour' which set all employees the challenge of coming up with innovative ideas to help us target a step change in leakage and water abstraction over the next 10 years. As part of this the 'Leakage Incubator' explored novel ideas that consider how we minimise the impact of voids and 'uber-leaks' on our network.

### Future outlook

We expect to be back on target next year and for the remainder of AMP6.

## Speed of Response to Visible Leaks

Performance is disappointing but crucially we are committed to respond to 100% of all customer reported leaks. We value every customer's experience and recognise that improving overall customer experience requires a dual focus on both the quality as well as the speed of the response. As a result of our performance, we'll be returning £1.4m through an underperformance penalty.

### Drivers of performance

This measure was designed to ensure we meet our customers' expectations when it comes to fixing visible leaks rather than being a measure to actually drive down overall leakage.

In practise, the measure is not flexible enough to demonstrate we are meeting that expectation. Importantly, it does not take into consideration the consequence of the failure and in doing so, treats a trickling leak and a large burst equally.

Despite the reduction in performance, our individual repair gangs are now around one third more productive in terms of jobs completed per day than they were in 2015/16.

### Steps to Improve

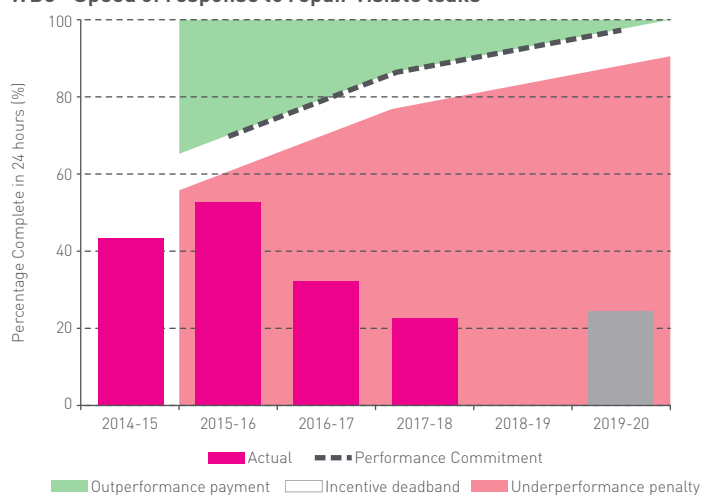
To efficiently run our business we need to prioritise our response to visible leaks with the focus on those that are likely to have a greater impact on more customers, which is the best way to get value for money for customers from our leakage activity.

We have an ongoing campaign to build our workforce in order to improve the flexibility of our response. This will help ensure critical staff are not diverted from completing repair jobs to respond to an incident.

### Future outlook

By 2020 we do not anticipate performance against this measure will significantly improve as our efforts will focus towards a more sophisticated measure in AMP7.

**WB3 - Speed of response to repair visible leaks**



## Low Pressure

Despite a small increase in the number of properties reported this year, we've met the performance commitment for the third year in a row and continue to seek innovative solutions to remove the risk that our customers will experience low pressure. Our performance has earned a £36k outperformance payment.

Our current performance commitment has some limitations as it treats every property equally irrespective of the number of times our customers experience low pressure each year. As we develop our plans for AMP7 we are looking at ways to adapt this measure to better reflect the breadth of customers who experience pressure issues each year.

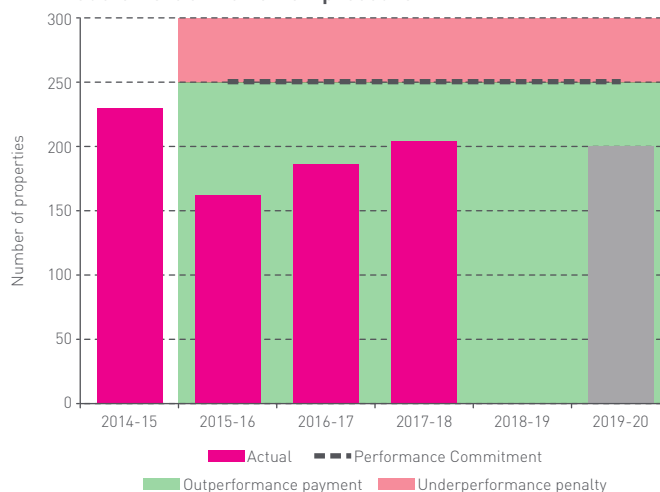
### Drivers of performance

We continue to use traditional solutions to great effect where we can, but the properties that are left on the register require more complex and costly solutions.

For some properties the installation of small pump technology allows us to alleviate the low pressure issues. This is a promising technology that we hope to make more of in future where a solution is required to just a small number of properties

We're also focussing on those properties which are at most risk of triggering an addition to the low pressure register.

WB7 - Customers at risk of low pressure



### Steps to Improve

The low pressure register is limited in its ability to predict properties at risk of experiencing low pressure. Moving forward we are reviewing all properties that have experienced low pressure but have not yet triggered the register standards.

By reviewing these properties we are able to undertake initial feasibility studies of the solutions that would be required in the event of a property being added to the register. This significantly speeds up the response time and enables

us to remove properties throughout the year as part of a smoother capital delivery programme.

Looking to the future, our customer research has indicated that low pressure is the service failure most of our customers have experienced. Whether this is for a short, one-off period or something that occurs regularly it prevents our customers from going about their daily routine.

### Future outlook

By 2020 we are forecasting no more than 200 properties will be on our low risk register.



# 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 - static for the third year running. We've taken action to improve and will keep going until we make progress. We look forward to the introduction of Ofwat's new C-MeX measure. Currently in development, we believe that this measure will provide a truer reflection of our relative performance.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2016/17	2017/18	
RA1	Customer satisfaction with their services (based on a survey)	Grading	Median (Median)	Upper quartile (Upper quartile)	NIL Non-financial
RA2	Customers' experience of dealing with us (based on Ofwat's SIM)	SIM Score	83.51 Ranking tbc (Upper quartile)	83.2 Ranking tbc (Upper quartile)	Based on Ofwat assessment
RB2	Percentage of customers who do not pay (household bad debt divided by total household revenue)	Percentage	1.8% (2.7%)	2.20% (2.7%)	NIL Non-financial

## Drivers of performance

Customer satisfaction is measured by the UK Customer Satisfaction Index (UKCSI) - a survey independently conducted by the Institute of Customer Service. During 2017/18 we have made a step change to become an upper quartile company in the utility league table.

Overall we have seen a 30% reduction in the number of billing related written complaints which has contributed to a 15% overall reduction in written complaints year on year.

We were delighted to be awarded the Gold Award for the Best Utility at the UK Complaint Handling Awards for 2018 - whilst we never want our customers to experience service that leads to a complaint it is great to know we offer one of the best resolution processes when it's needed.

We had already extended our opening hours for billing enquiries to include evenings, weekends and bank holidays. But we've gone further, we're now the only water

company offering 24/7 billing services. We've managed this by upskilling our best performing operational call centre staff to also cover out of ours billing enquiries.

The scripts have been redesigned to reduce technical language and reduce the risk that jobs will be allocated to the wrong type through more prescriptive decision making processes. At the same time our recruitment of front-line engineering teams has an added focus on the customer mind-set not just the technical skills to do the job.

Our new website, launched in 2017, has increased our customers' choice about the channel they choose to use. But the system does not always allow customers to complete their end-to-end journey without having to follow this up with a call due to the limitations of the system; we know this can have a negative impact on satisfaction levels although analysis suggests it doesn't necessarily lead to the customer being dissatisfied overall. Despite this, we are listening to our customers' feedback and have a series of improvements planned for 2018/19 to rectify these issues.

Our Customer Communication Team, born out of an external review of best practice, has continued to evolve and drive improvements. These teams actively case manage customers whose jobs aren't going through our standard process such as a delay due to inclement weather. This specialist team alone has led to around a 3% reduction in chase calls for waste water jobs.

## Steps to improve

Historically we have thought mainly about financial vulnerability which is discussed in our performance commitment for bad debt. We are in the process of reviewing our priority services register to incorporate a much wider view of circumstances in which customers may lose access to our service. We need an approach which is more flexible, wider reaching and pulls on multiple sources for information. A key part of this is our work with other utilities and local authorities to share best practice and develop a common language to ensure we know what great looks like for our customers.

Bad debt performance is targeted to improve in the next year, with more focus being placed on faster and better cash collection.

Future debt improvement will be driven by transformational projects bringing new tools to the credit team, such as the automated dialler, an upgrade to the debt collection platform and improved tools for customers to manage their accounts online. These new tools, coupled with updated operational processes for Customer Journeys and Debt strategies, aim to further improve on cash performance in 17/18 and beyond.

Work has been ongoing on the re-design of our customer debt journey, using analytics and customer feedback to identify where processes can be changed to elicit a more favourable response, improve identification of vulnerable customers and improve efficiency of collection. One of these initiatives is the Full Data Share project which aims to integrate customer credit information into decision engines to better inform how customers with a history of debt can be supported. The additional information the data share will provide will help in clarifying residency disputes, as well as identify potential vulnerable customers. These analytics will better help Severn Trent understand the customer to provide the fairest service to all customers.

There is a consistent push to direct customers towards self-service channels and to direct debit plans to facilitate efficient customer interaction. New payment channels will be introduced such as future and reoccurring card payments enabling customers' greater flexibility when making payments.

### **Future outlook**

By 2020 we expect to maintain our upper quartile performance in customer satisfaction and keep debt levels stable at 2.2%. Our SIM performance in 2019 is key; we're expecting our performance will remain stable from the 2017/18 level.

# Asset Health

As a company we extract water from one of our 130 sources before treating it at 133 water treatment works. We then transport it through 47,151km of mains using over 765 pumping stations to get it to our customers' taps. Once it returns to our 94,027km of sewer we need another 4,468 pumping stations to move the sewage to our 1,010 sewage treatment works.

It's a huge operation and many of our customers are unaware of the scale of our business. But our customer insight also tells us that customers expect us to maintain and replace our treatment works, pumping stations and underground assets in a timely manner. They want us to ensure our assets are fit for purpose so that the quality of their service isn't impacted. In short, it's our 'day job.'

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2016/17	2017/18	
WA3	Asset stewardship - number of sites with coliform failures (WTWs)	Number	5 (less than 8)	8 (less than 8)	(£0.463m)
WB6	Asset Stewardship - mains bursts	Number	5173 (6905)	5825 (6905)	NIL Penalty only
SA4	Asset stewardship - blockages	Number	45,240 (less than 50,078)	45,401 (less than 50,078)	NIL Penalty only
SC3	Asset stewardship - environmental performance	Percentage	97.99% (100%)	97.67% (100%)	NIL Penalty deadband

## Water Service

### Drivers of performance

Having delivered two successive years of improvement, we were disappointed to see deterioration this year. In total we detected coliforms at 8 treatment works resulting in an underperformance penalty of £0.463m.

We have also seen an increase in the number of burst mains repaired during the year. This is, in part, due to the difficult operating conditions experienced during the year which resulted in an increase in burst mains and the resultant impacts on leakage and supply interruptions. However, our performance remains substantially under the performance commitment.

### Steps to improve

In response to an increase in the number of coliform failures, our teams have conducted 278 on-site operational checks and a further 677 audits on our sampling assets. Immediate corrective actions have been implemented where

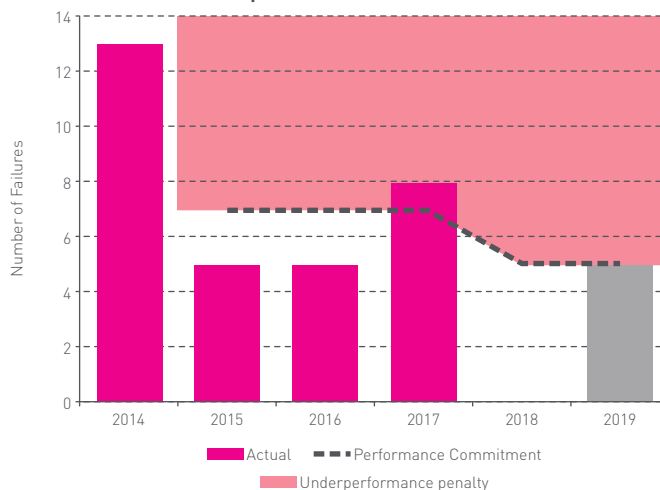
necessary as well as key learnings to embed improvements.

We have also revised the site checks scheduling process to ensure that those critical maintenance tasks that are essential to reducing the risk of coliform failures are individually identified and not amalgamated with general site inspection tasks.

Agreed a new approach on our sampling facilities, including sample line replacement with copper to enable a switch to flaming of sample taps as the standard method of disinfection.

On the network we are focussing on eruptive bursts which impact directly on customers as they manifest a supply interruption.

WA3 – Asset Stewardship-number of sites with coliform failures



Reviewing our mains replacement programme to ensure hotspots most at risk of mains bursts are prioritised for the remainder of the AMP period.

### Future outlook

We forecast our coliform performance will stabilise and meet the commitment of <6 works in 2020. Similarly the number of mains bursts will remain ahead of target at <5394.

## Waste water Service

### Drivers of performance

As part of our drive to reduce sewer flooding and pollution incidents we're focussing on the health of our waste water assets. A great example of this is our work of identifying clusters or hot-spots of external sewer flooding caused by debris, foreign objects or accumulation of fats, oils and greases in our system. These objects can lead to blockages within the sewer network.

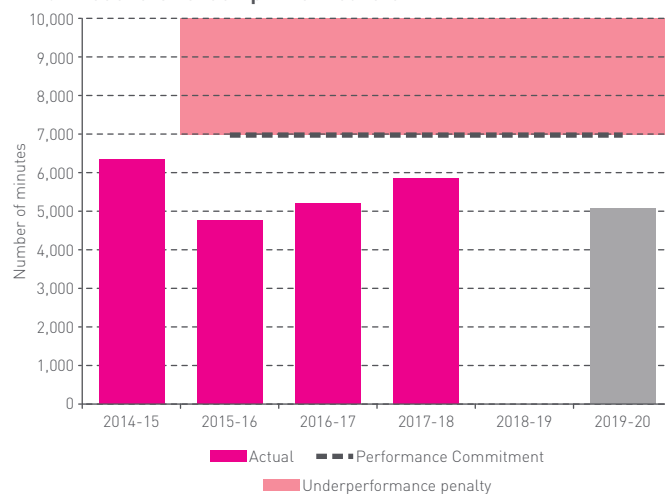
This cluster analysis is enabling us to better target our proactive maintenance, such as sewer jetting, in areas prone to this type of flooding to reduce the risk of debris accumulating in the sewer.

We've also continued to drive our education programme to ensure customers in these areas are aware of what can and cannot be flushed down the toilet.

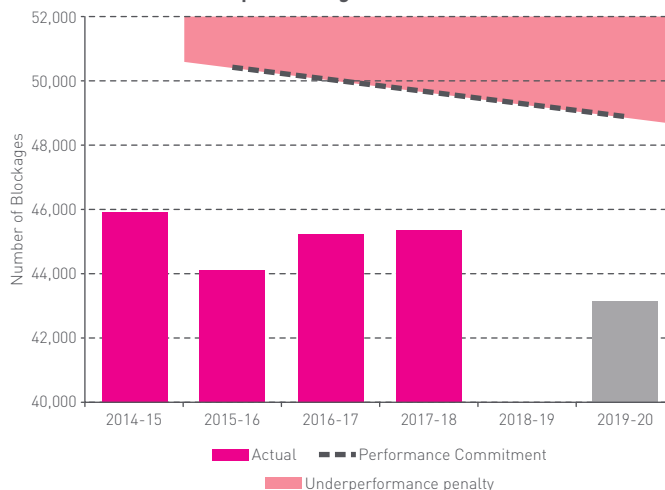
We also had a strong year when considering the performance of our treatment works. Compliance with numeric consents was 99.86% but we know we need to focus on the non-numeric compliance.

Whilst we have shown a small improvement year on year, compliance with our flow permits slipped towards the end of the year, another area we know we need to focus on moving forwards.

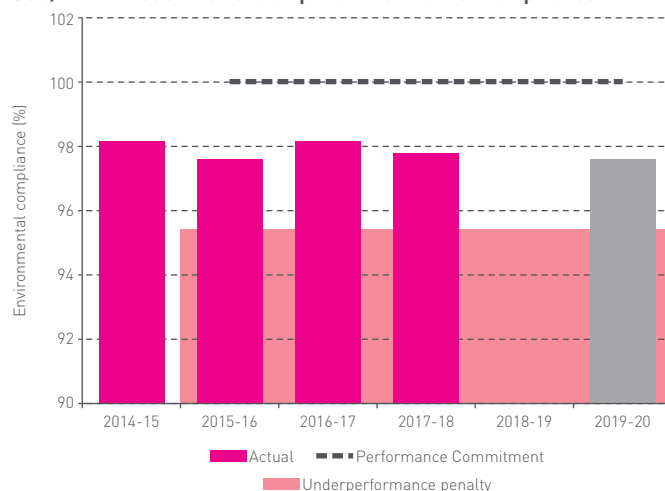
**WB6 - Asset stewardship - main bursts**



**SA4 - Asset stewardship - blockages**



**SC3/WD2 - Asset stewardship - environmental compliance**



### Future outlook

We are forecasting our environmental compliance will remain stable, missing our committed performance level but

within the penalty deadband. Our blockages performance will remain well ahead of our commitment.

# 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 includes 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)
			2016/17	2017/18	
WB5	Percentage of customers with resilient supplies	Percentage	77.0% (NA)	77.4% (NA)	NIL
WB8	Restrictions on water use	Number	0 (0)	0 (0)	NIL
WB9	Timing delays on Birmingham resilience scheme	Milestone	NA	Milestone met (Milestone)	NIL
WB10	Non-delivery of Birmingham resilience scheme	Milestone	NA	Milestone met (Milestone)	NIL
WB11	Timing delays on the community risk schemes	Milestone	NA	Milestone met (Milestone)	NIL
WB12	Non-delivery of the community risk schemes	Milestone	NA	Milestone met (Milestone)	NIL
WB13	Timing delays on the Elan Valley Aqueduct (EVA) maintenance	Milestone	Scheme complete	Scheme complete	NIL
WB14	Non-delivery of the Elan Valley Aqueduct (EVA) maintenance	Delivery	Scheme complete	Scheme complete	NIL
SA3	Partnership working	Number of schemes	0 (NA)	8 (NA)	NIL
SC5	Sustainable sewage treatment	Number	0 (0)	0 (0)	NIL Outperformance payment only

## Percentage of customers with resilient supplies

Ensuring our assets are resilient is a key element to make sure we provide services for both our current and future customers. Last year we successfully completed the first element of our Birmingham Resilience Programme with the maintenance of the Elan Valley Aqueduct.

This year we have completed the first element of our resilient supplies work programme. We have provided our customers with a second supply source by connecting an 8ML/d borehole source to our integrated grid.

## Future outlook

We're on track to provide a second source of supply to an additional 0.7% of our customer base by 2020.

## 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.

Throughout the year we have ensured that all key internal stakeholders have received fresher training on our drought plan and the necessary actions we need to take as certain triggers are passed. Those stakeholders meet regularly to discuss our performance and agree mitigation actions as necessary.

In early January 2018 we identified a number of our reservoirs that could benefit from mitigating action to ensure they were at an appropriate capacity by the start of the spring period of 2018. Our actions mean that there are no water resource concerns for Severn Trent Water customers in the forthcoming months.

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.

## Birmingham Resilience Programme

Our Birmingham Resilience Programme is our flagship investment project for this AMP period. It is made up of three key components.

Firstly, the Birmingham Resilience Scheme which creates a new alternative supply of water including upgrades to our water treatment works at Frankley. This element of the programme is an enabler which will allow longer shut downs of the Elan Valley Aqueduct from 2020 onwards to undertake more detailed inspections and maintenance. This element will not alter the risk of failure itself.

The second element comprises three community risk schemes to reduce the risk of failure of the Elan Valley Aqueduct at critical locations.

The final element covers maintenance of the Elan Valley Aqueduct at Bledffa, where the current structure needs essential maintenance. This will remove the risk of failure of the current tunnel and conduit by transferring the flow to a new tunnel adjacent to the current asset. We reported completion of the Elan Valley Aqueduct maintenance last year.

This year we have a number of milestones to deliver for the main Birmingham Resilience Scheme and the Community Risk schemes.

Below we give a brief update on each milestone. A more detailed update on the project will form part of our PR19 business plan submission to Ofwat on 3 September 2018.

Pumping station and pipeline - our milestones for this year are designed to ensure we are on track to deliver the 117 ML/day capacity from the new pumping station and pipeline from the abstraction point on the River Severn. Our final engineering solution has capacity to abstract up to 237 ML/day in line with our licence, far in excess of the original commitment. As such we consider these milestones have been achieved.

Treatment works upgrade - the milestones for the upgrade works at Frankley WTW are essential to ensure the works has capacity to treat the additional flow from the River Severn. The dual streaming project has a target capacity of 237 ML/day but the clarification units, rapid gravity filters and sludge upgrades were required to meet 120 ML/day.

Our final engineering solution identified synergies and alternative configurations that are enabling us to deliver all elements of the project at the capacity of 237 ML/day. As such, we consider that all of the milestones for the treatment works upgrades have been met.

Community Risk Schemes - Our independent technical assurance partners have reviewed our progress and confirmed that the project is delivering in line with the Final Determination requirements. As such we consider both the timing delay and delivery scope milestones have been achieved.

### Future outlook

By 2020 we are forecasting that we will have met all obligations under the Birmingham resilience programme and community risk schemes.

## Partnership Working

Last year we reported that we had completed the activity on six flooding partnership schemes. We are now able to confirm that the Environment Agency has endorsed the completion of these schemes along with a further two:

Hanley, Stoke on Trent - during repaving of the Hanley area of Stoke, an increase in storm water run-off would be diverted to the combined sewer which did not have the spare capacity to accept it. Working with Stoke on Trent City Council, we developed a surface water management strategy that enable the repaving work to continue whilst reducing the flood risk to ten commercial properties.

Hagley, Worcestershire - There was significant customer and local MP concern about multiple flooding problems in Hagley. The project completed jointly with Worcestershire City Council, Wyre Forest District Council and the Environment Agency. It alleviates combined sewer flooding at 14 properties and 3 areas at risk of highway flooding.

### Future outlook

We'll continue working with our partners to deliver all 21 partnership working schemes by 2020, in line with our commitments.



# Serving Our Community

We're increasingly being seen as having a key role in the everyday lives of local communities. We need to be socially responsible, work alongside our customers and communities and work with a spirit that improves their lives. 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 provide a greater sense of community. We're proud of our achievements and will aim to do more alongside delivering our core water and waste water services.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2016/17	2017/18	
WF1 SE1	Improved understanding of our services through education	Number	167,024 (160,000)	200,536 (140,000)	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	50,903 (50,000)	51,652 (50,000)	NIL Non-financial

## Customer Education

We have maintained our strong performance from 2016/17 and educated a further 200,536 customers, bringing the total over the last three years to 485,288.

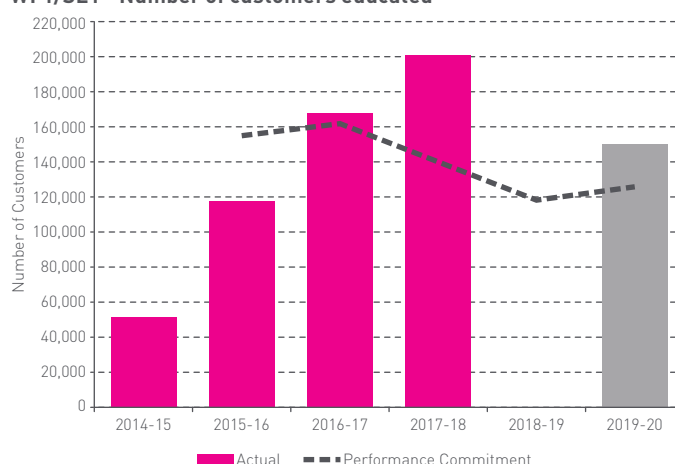
### Drivers of performance

This year we've committed £50,000 from our heritage fund to complement a National Lottery grant to construct a classroom at our Claymills works to enable educational visits to the site. We've also opened a third education site at Wolverhampton, recruited new staff members with educational backgrounds to influence and guide the content through a regular review aligned to the national curriculum requirements.

We've undertaken over 15,000 in-house water audits, including working with Nottingham County Council to target the more difficult to reach customers in social housing through a multi-utility review of their household spend.

Our education programme also looks at misuse of sewers. We have educated over 29,000 customers following sewer misuse about what should and should not be flushed down the toilet.

WF1/SE1 - Number of customers educated



### Steps to improve

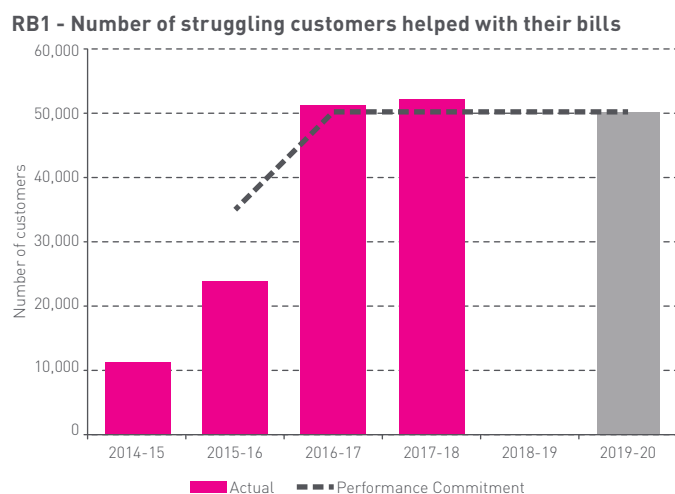
We're focussing on improving our targeting and quality of our schools education programme. We've hosted co-creation events with teachers to further adapt and refine our educational approach.

Where possible we are looking at ways to tap in to our existing customer touch points to further our education. Meter readers hold some potential and we have been trialling an approach with our high consumption customers.

Looking forward we have purchased two education buses to allow for a more immersive educational experience such as role playing and gamification.

### Future outlook

Our ability to sustain the level of activity gives us confidence that we will be able to continue to outperform the target in the remaining years and enable us to meet the AMP total of 780,000 customers (11% above target).



## Supporting customers with their bills

### Drivers of performance

This year we have seen some real progress in the way in which we help our customers struggling to pay their bills. We have worked in collaboration with our partners such as social housing for a full year with a real focus on customers in vulnerable circumstances.

This year we've launched our Food Bank Initiative as we've sought to reach out to those who might benefit from our support in paying their water bills. We've worked closely with food banks around Birmingham to provide our customers with information about how we can help. Meeting in a neutral environment, where they are already receiving support and advice, gives us another way in to the small number of our customers find our normal contact channels difficult to use. The results have been very positive with 90% uptake of at least one of our support packages.

We've also rolled out our payment matching scheme which is being positively received. The outcome of this scheme means that customers are able to clear their debt quicker than before.

### Steps to improve

We're working on a priority services register which is an innovative approach in collaboration with the energy sector to further look at how we are able to help our customers who might be in vulnerable circumstances and face difficulty in paying their bill.

### Future outlook

For the remaining years of the AMP we expect to continue to support at least 50,000 customers each year.



# 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 which has earned an outperformance payment of £2.5m. We're on-track not only to meet compliance standards but deliver sustainable improvements through investment and through changing the way we all interact with our environment. Regaining the Environment Agency's 4\* status - awarded for exceptional environmental performance - is testament to the progress we're making.

Code	Description	Unit	Actual performance (with target in brackets)		Outperformance Payment/ (Underperformance penalty)
			2016/17	2017/18	
SC2	The number of category 3 pollution incidents	Incidents	301 (402)	327 (374)	£2.533m
SC6	Serious pollution incidents	Incidents	7 (6)	2 (4)	NIL
SC8	The number of category 4 pollution incidents	Incidents	239 (23)	157 (182)	NIL
WE1	Size of our carbon footprint - water	ktCO <sub>2</sub> e	250 (224)	256 (222)	(£0.483m)
SD1	Size of our carbon footprint - waste	ktCO <sub>2</sub> e	207 (215)	206 (209)	£0.044m
WA4	Number of successful catchment management schemes	Number	NIL (NIL)	NIL (NIL)	NIL
SC1	Improvements in river water quality against WFD criteria - waste water	Number	8 (NIL)	16 (NIL)	NIL
WD1	Improvements in river water quality against WFD criteria - water	Number	7 (NIL)	3 (NIL)	NIL
WB1	Resource efficiency (distribution input per customer)	l/p/d	236 (222)	235 (219)	NIL
WD3 SC4	Resource efficiency (distribution input per customer)	Hectares	293 (N/A)	337 (N/A)	NIL
SA5	Statutory obligations (Section 101A schemes)	Number	14 (N/A)	32 (N/A)	NIL
SC5	Sustainable sewage treatment	Number	0 (0)	0 (0)	NIL
WD4	Sites with eel protection at intakes	Milestone	NIL	NIL	NIL

NOTE: We have included an explanation of why we have zero sites under the Abstraction Incentive Mechanism later in this commentary.

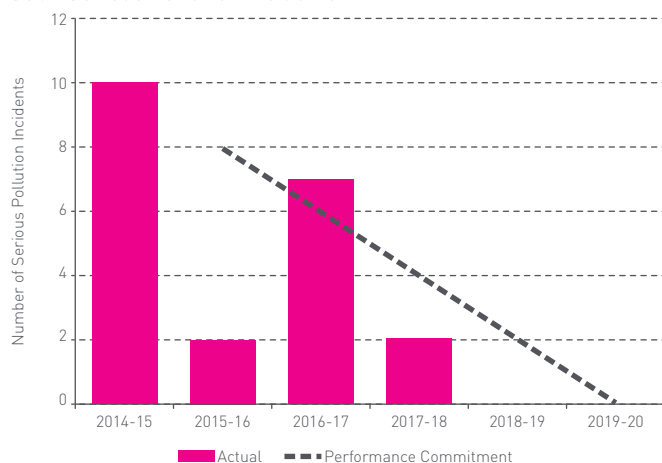
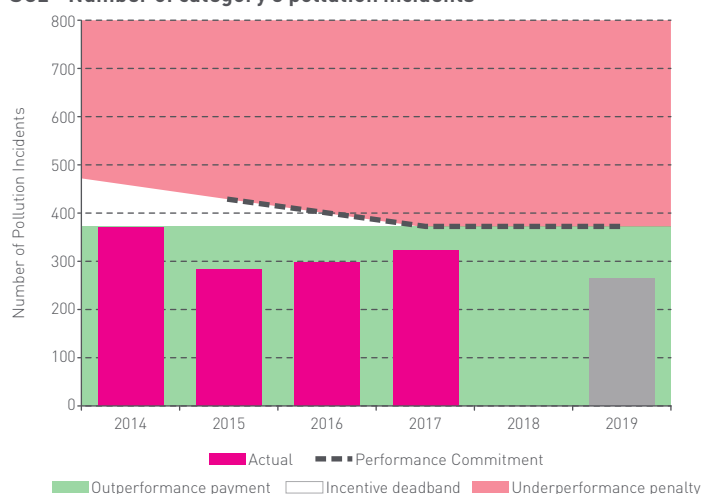
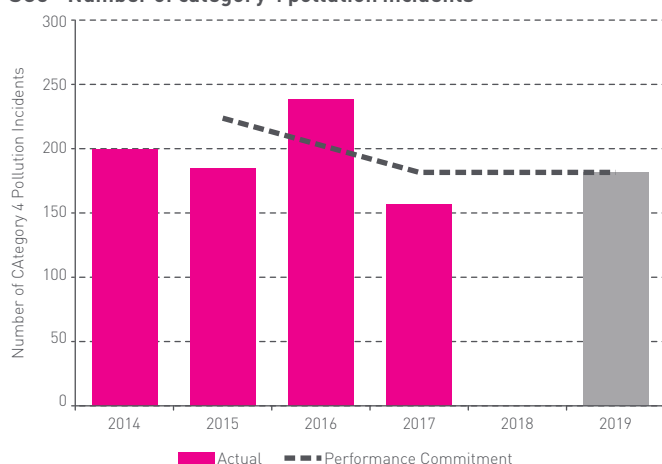
## Pollution Incidents

Our impact on the environment is closely regulated by the Environment Agency in England and Natural Resources Wales. We report our performance against three categories:

- Serious pollution incidents - category 1 and 2 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're pleased to report we've

met all three of our pollutions targets this year - an important improvement and vital in our efforts to protect the environment. This performance has earned a £2.5m outperformance payment.

**SC6 - Serious Pollution Incidents****SC2 - Number of category 3 pollution incidents****SC8 - Number of category 4 pollution incidents****Drivers of performance**

A key driver of our performance has been the use of detailed data to identify hot spots and high risk areas where we can target our cleansing work to keep the sewerage network clear or obstructions and blockages.

To support this we have installed over 1,000 network monitors in the most high-risk areas that allow us to monitor the performance of our waste water network in real time, and have flow monitoring at more than 90% of our combined sewer overflows.

Our workforce is also empowered to share best practice and lessons learned, built on consistent use of “Golden Measures” to measure and identify the most at-risk assets and the appropriate mitigation measures needed to prevent pollution incidents.

**Steps to improve**

We have established the ‘Pollution Focus Group’ tasked with developing a sustainable forward plan to ensure we continue to drive improvements throughout AMP6 and AMP7. It will focus on improving root cause analysis, deep dive of repeat incidents, analysis of historical incidents to reconsider lessons learned and identify ways to predict incidents, simplifying and standardising reporting and ensuring our reactive response is the best it can possibly be.

Previously we have not had a significant number of incidents caused by our drinking water system. However, in recent years we have become better at detecting and monitoring the impact of chlorine on the natural environment. This has led to us recording a slowly increasing number of incidents year on year.

To combat this, our reaction to potential incidents is becoming more sophisticated, through understanding how the chlorine may affect the land or where the greatest accumulation of chlorine may occur. This helps us prevent the impact of the chlorinated water from harming the environment or local species.

### Future outlook

By 2020 we are forecasting to meet target in all three areas, with 266 category three incidents, 182 category four incidents and no serious incidents (category one and two).

## Carbon Footprint

### Drivers of performance

We've held the Carbon Trust Standard since 2009 for successfully measuring, managing and reducing carbon emissions. This is most strongly seen in our waste water performance where our renewable energy programme and energy initiatives have driven strong improvement over many years. We expect this to remain positive. We've also invested to reduce energy consumption used to treat and distribute water but this has been more than offset by increased volumes needed to meet commercial demand and keep customers supplied with water.

Our performance has earned a £44k outperformance payment for waste water, offset by a £0.483m underperformance penalty for the water measure.

Our water service emissions continue to rise as we see an increase in commercial, we've also seen an increase in use as a result of the Birmingham Resilience programme which requires water to be pumped from Trimpley to Frankley - this alone has doubled the energy use at our Trimpley site.

In our continued efforts to reduce the impact of discoloured water on our customers we have significantly increased the amount of mains flushing and cleaning we are undertaking. This provides a further upward pressure on the volume of water in to supply and the associated treatment and pumping costs.

### Steps to Improve

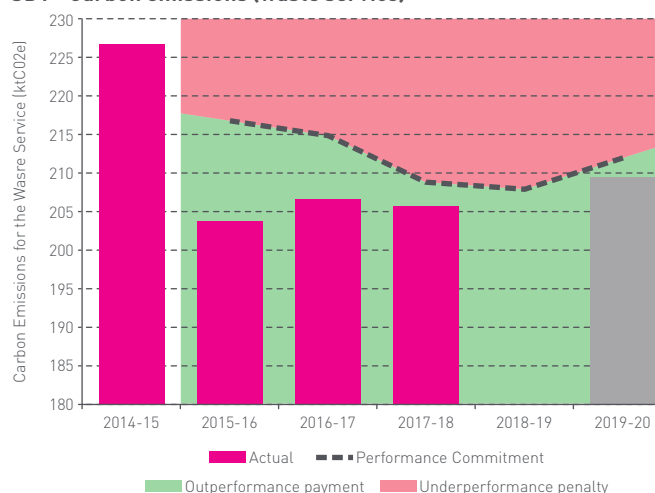
Our review of best practice in the wider market suggested we could do more to increase the effectiveness of our schemes. One key change is that we have employed two full time energy technicians who are responsible for understanding energy use in our counties and driving improvements where possible.

We're also looking to adjust the energy use of our assets to help balance the demands on the electricity grid. Our ability to reduce demand from some of our assets helps reduce the overall demand on the grid during peak times. In addition, all investment targeted at demand management is key element of reducing overall levels of water in to supply. Our initiatives to drive down leakage and reduce water use in both households and commercial properties all contribute to reducing demand.

**WE1 - Carbon emissions (water service)**



**SD1 - Carbon emissions (waste service)**



Reducing the distance driven by our fleet as well as upgrading our vehicles to more efficient models at the right time. Looking to the future we are exploring the options for a move towards an electric vehicle fleet to further reduce our fuel use and emissions to the environment.

### Future outlook

By 2020 we expect our waste water carbon emissions to increase slightly to 210 ktCO<sub>2</sub>e as new process are turned on. Our water service emissions will continue to miss our target at around 248 ktCO<sub>2</sub>e.

## Catchment Management

A river represents the whole landscape it runs through. We call this the catchment, which means a river is really all of the woodlands, meadows and farmland where water falls as rain. The rain percolates through the soil and makes its way through drains and underground water channels into the river itself, making it a good place to measure the health of the whole environment. We use catchment management as a way for us to better manage the environment. We're working closely with Natural England, the National Farmers' Union of England and Wales (NFU) and farmers and landowners to develop a host of catchment conservation initiatives to manage land more sustainably, benefiting rivers and wildlife.

Our collaborative approach to catchment management has led to remarkable uptake levels. We've engaged with over 2000 farmers and funded more than 620 grants, totalling more than £2.5m. Our efforts are increasing being recognised - we've just won the top prize for the Best Environmental or Sustainable Programme at the Corporate Engagement Awards 2018. The judges were "overwhelmed with the great results and wealth of supportive

data, as well as Severn Trent's commendable efforts to engage with stakeholders."

We're already planning to do more and aim to improve 750km of waterways across the Midlands. We're confident of delivering the target of 12 catchments by 2018/19.

### Drivers of performance

We've significantly increased the size of our expert team who've worked with farmers in our priority areas to reduce the risk of pollution into the watercourses we use - and in doing so delaying or avoiding the need for us to install costly treatment.

Natural England has been invaluable in our success - it has provided local, expert knowledge and contacts. Results are looking positive - we're now able to see a reduction in pesticide levels which gives us the confidence we need to make further progress.

One critical feature of our approach is that we offer a variety of approaches - product substitution, payments to farmers for improving water quality by reducing metaldehyde, grants to farmers to address other water quality issues, pesticide amnesties and farm advice framework.

The grants we offer to farmers can be used for farm management (for example, moving livestock from high-risk fields) or infrastructure (from fencing to buying precision farming equipment) - and we give farmers the opportunity to propose their own innovative ideas.

### Future outlook

We will continue to drive engagement in the remaining catchments. We'll also continue with our trials including with our Real Time Abstraction Management Programme - developed in partnership with the University of Sheffield - which predicts the arrival of

metaldehyde spike at abstraction sites. The model outputs inform abstraction decisions enabling us to temporarily suspend abstraction when required. This is currently being trialled in the Draycote catchment and we'll be looking to roll this out further.

Ultimately, the work will be assessed by the impact on water quality. Analysis of pesticide concentrations in the surface water catchments we've worked in shows fewer pesticide exceedances so we know our approach is delivering improvement. We're also looking to take this learning into AMP7 and develop an outcomes based catchment management performance commitment

## Biodiversity

We're pleased to be able to report we have now reversed a deteriorating trend - we'd previously seen a net deterioration in performance of 41 hectares. We are now reporting an overall improvement in biodiversity this AMP of three hectares.

### Drivers of performance

We have worked closely with Natural England to confirm that the deterioration we have previously reported at Leek Moors was not due to our activity. The deterioration was due to a third party planting trees in an area that impacted on the habitats of ground nesting birds. With the agreement of Natural England the impact of this deterioration of 30 hectares is no longer contributing to our performance.

The River Clun site is linked to our National Environment Programme scheme which was completed and approved by the Environment Agency earlier this year. Natural England have also confirmed that this meets the biodiversity requirements for 15 hectares.

### Steps to improve

We held a joint volunteering day alongside Natural England and the Environment Agency at Bradgate Park and Cropston Reservoir clearing willow and initiating the site management plan. The action plan at this site is due for completion in March 2019 at which point the 5 hectare deterioration will be reversed.

Our National Environment Programme scheme on the River Eye in Gloucestershire is due for completion in September 2018, delivering an additional 6 hectares.

We have a number of potential sites covering a combined area of more than 200 hectares at which we have an established site specific action plan detailing the activities we need to complete to improve biodiversity. These have been reviewed and agreed by Natural England. The activities are a combination of initiatives either linked to National Environment Programme schemes, part of our catchment management programme or initiatives on our own sites.

### Future outlook

By 2020 we are forecasting to significantly exceed our committed performance level by delivering 588 hectares.

### Eels Protection

Our regulatory performance commitment is to deliver 20 improvements by March 2021; there are no annual targets to meet. This year we completed our first scheme this year following endorsement by the Environment Agency.

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.

We have progressed the detailed feasibility design work and awarded the contract award for the two high priority sites at Mythe and Upton as agreed with the Environment Agency. These schemes are on track to deliver early in 2020.

Of the remaining obligations this requires a combination of solutions including new screening, improvements to existing screens and some fish friendly return to river apparatus. We will meet the milestone in 2020 to demonstrate delivery by 2021.

### Water Framework Directive

We continue to make good progress with delivery of the National Environment Programme (NEP) and Water Framework Directive commitments. Our programme significantly ramps up in the later years of the AMP with the majority of permit revisions due to come in to force during 2018/19 and 2019/20.

Our water service programme is progressing well with almost half of the obligations relating to river water flow delivered to date. We have completed the delivery, earning 10 of the 31 points required to meet this obligation.

The waste water programme is much larger in scope with 202 points required to be delivered by 2020. We have used the performance commitment to accommodate changes in the Environment Agency's NEP5 (this was agreed twelve months after our 2015-20 plan). The changes were generated by additional bodies of evidence and improved river quality models being available and resulted in 15 of the original 89 proposed schemes proposed being removed and substituted with 32 replacement projects. As a result

of these changes, which were agreed with the EA, customers will benefit from improvements in an additional 244km of river in 2015-20.

We have completed the work to earn 16 points during 2017/18, taking the cumulative total to 24.

There is still much to do to deliver the remaining programme - most of which will be delivered in the next two years in line with EA permit commencement dates agreed with the Environment Agency - but we remain confident of delivery.

### Innovating in waste water treatment

Our commitment to remove phosphorous from our sewage treatment works has seen our innovation team evaluate technologies from across the world.

Following intensive £2 million trials at our Packington site over the last two years, we're now commencing the roll-out of five different and highly advanced technologies. These include a magnetite ballasted coagulation process pioneered in the US. At one site this technology has replaced our original solution, which was costed at £21 million.

The new solution reduced the cost to £12 million and will lead to a total expenditure saving of nearly £9 million - a return on investment of 218% on one scheme alone.

By 2020 we will deliver 31 points on the water service meeting our committed performance level. We will over-deliver on the waste water service by delivering 221 points as our programme has adapted to deliver the changes in our environmental programme required by the Environment Agency.



## Resource Efficiency

We've managed to improve our position for the third year running, but have not achieved our target. We developed this measure to help us manage water efficiency and leakage to enable us to take less from the environment.

Our improvement this year was delivered despite a number of upward pressures on the amount of water we have to put in to supply. Increasing our mains flushing programme to reduce the number of drinking water quality complaints. At the same time the freeze/thaw event increased the number of bursts and water leaking from our pipes, all this water had to be replaced again increasing the water in to supply.

We'll continue pushing our water efficiency programme - we're now using demographic data to identify customers who we believe stand to gain most from our water efficiency activities. This, together with improved leakage, should drive improvements on this measure.

### 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 81 properties and have a forecast of up to 328 properties that we can connect over the next two years.

There are a number of higher cost schemes within this where we are exploring options to ensure we deliver the most cost effective solution.

## Future outlook

By 2020 we forecast that we will deliver the 312 properties in line with our commitment.

## Abstraction Incentive Mechanism

Our region is dominated by sandstone aquifers and regulated rivers. Prior to AMP6, we followed a progressive approach to the Restoring Sustainable Abstraction programme whereby we reduced or stopped abstraction from those sources known to contribute to low flow problems, and put alternative, sustainable sources of supply in place. By the end of AMP5, we had no obvious sites where a short term reduction in abstraction would lead to an immediate improvement in river flow.

For AMP6, we developed a programme to deliver the long term abstraction reduction and flow improvement measures needed to achieve the remaining Water Framework Directive (WFD) concerns about abstraction in our region (these are at a water body/aquifer scale, and relate to long term abstraction rates and the relationship with groundwater recharge. The improvements will generally be seen over many years as sandstone groundwater levels recharge relatively slowly, making short term improvements difficult to measure. We will also be carrying out our largest ever programme of environmental investigations into the impacts of our ongoing groundwater abstractions and the implications for surface water features.

We recognised that the nature of our programme meant that AIM was not an appropriate incentive mechanism. We therefore developed an innovative performance commitment which incentivises us to do our fair share

to improve the WFD ecological status of a number of water bodies across our region. In each of the targeted water bodies we have quantified the impact that our abstractions are having on stream flows, and have agreed with the EA the mitigation measure that will remove our impact and help move the water body to good ecological status. The structure of our ODI performance commitment gives us a direct incentive to go beyond what is named in the NEP and undertake specific improvement measures to help move water bodies to good ecological status where it is cost beneficial to do so.

We are also looking to the future and we are currently developing a bespoke version of the Abstraction Incentive Mechanism that will apply in our region from 2020 onwards. This measure will focus on environmentally sensitive sites and will incentivise reducing abstraction below the long-term sustainable level wherever possible, recognising that for these sites every reduction in the volume abstracted is beneficial.

# Responsible, efficient investment

## **We're incentivised to deliver great service efficiently**

Our total expenditure includes operating costs (running costs such as employee pay, power and rates as well as innovative solutions such as catchment management) and capital investment to maintain or improve our assets. 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 Final Determination reflects the amount Ofwat assumed we would need to spend in 2015-20, and used this to calculate bills.

## **Increasing activity to improve water quality and security**

We've spent around £1,650 million totex on abstracting, treating and distributing clean water over the last three years, which is in-line with the totex Ofwat assumed in the Final Determination.

Within this, we've increased the level of activity on water quality and security into 2015-18 because we knew we needed to do more to meet customers' expectations. Given our performance, we believe this has been the right course of action - we do not want to store up problems for the future. Our focus has however resulted in a slight timing delay to other programmes.

## **Benefitting from investment in waste water processes and assets**

We've spent around £1,400 million totex on collecting and treating waste water over the last three years, which is around 15% less than the totex Ofwat assumed in the Final Determination.

The increased activity on water framework directive relates to improving more rivers in our region than originally in our plan - our innovative incentive has allowed us this extra flexibility to work with the Environment Agency to do our fair share in 2015-20 rather than delaying improvements. The changes have led to us being a little behind on the programme but we're confident we can catch up over the next two years with the added benefit that we've aligned the improvements with our maintenance work to secure more efficient costs.

## **Combining data, design and innovation to drive efficiency**

We've delivered significant efficiency, using our established risk based investment approach, implementing innovative techniques and working with our supply chain to implement better ways of working - from using pre-fabricated construction material to reducing construction time. Our approach does not focus on cost alone - quality plays an important part in our supply chain

incentives. We are also investing in research and development and also encouraging all our people to come forward with novel ideas - we want to do things safer, better and faster. Our planning is also becoming more systems based - we're looking for solutions which solve more than one problem, enabled by the quality of our data and modelling. We're confident we can continue delivering efficiency, driving the frontier on waste and ensuring we make appropriate, balanced decisions on water.

## **Investing more now to secure future benefits for customers**

Looking forward, we know we'll need to do more to meet our customers' expectations in 2020-25. We'll only be able to do this if we invest to improve now. We're confident enough in our delivery and efficiency plans to earmark an additional £100 million to be reinvested back into our water business. We're excited to be investing in things like robotics, extra loggers across our network, and a new training academy - all designed to help improve our water performance and set ourselves up responsibly for the future.

# Section 4

## Additional regulatory information



# 4A - Non-financial information

Year ended 31 March 2018

Line description		Units	DPs	Current year	
				Unmeasured	Measured
Retail					
A	Household				
4A.1	Number of void households	000s	3	86.903	81.319
4A.2	Per capita consumption (excluding supply pipe leakage) l/h/d	l/h/d	2	141.14	121.18
Wholesale					
B	Volume (ML/d)				
4A.3	Bulk supply export	ML/d	3	6.340	0.000
4A.4	Bulk supply import	ML/d	3	45.360	0.000
4A.5	Distribution input	ML/d	3	1,876.950	

Water Waste water

# 4B - Wholesale totex analysis

Year ended 31 March 2018

Line description		Current year		Cumulative 2015-20	
		Water £m	Waste water £m	Water £m	Waste water £m
A	Actual totex				
4B.1	Actual totex	684.0	551.0	1842.4	1511.0
B	Items excluded from the menu				
4B.2	Third party costs	(5.4)	(0.4)	(15.9)	(1.4)
4B.3	Pension deficit recovery payments	(15.2)	(11.5)	(34.9)	(32.8)
4B.4	Other 'Rule book' adjustments	3.4	2.6	8.9	9.1
4B.5	Total items excluded from the menu	(17.2)	(9.3)	(41.9)	(25.1)
C	Transition expenditure				
4B.6	Transition expenditure	0.0	0.0	11.4	0.0
D	Adjusted Actual totex				
4B.7	Adjusted Actual totex	666.8	541.7	1811.9	1485.9
4B.8	Adjusted Actual totex base year prices	593.3	482.2	1,662.0	1,363.0
E	Allowed totex				
4B.9	Allowed totex based on final menu choice - base year prices	592.9	582.8	1657.0	1622.7

# 4B - Wholesale totex analysis

Year ended 31 March 2018

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 PR14 Final Determination reflects the amount Ofwat calculated that we would need to spend between 2015 and 2020.

The PR14 final determination (FD) included total expenditure (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.

## Differences between actual and allowed totex

Totex in £m at 12/13 prices	Service	Cumulative to 16/17	Cumulative to 17/18
Adjusted Actual totex (menu)	Water	1,068.7	1,662.0
	Waste water	880.8	1,363.0
FD menu assumptions	Water	1,064.1	1,657.0
	Waste water	1,039.9	1,622.7
<b>Total variance</b>	<b>Water</b>	<b>4.6</b>	<b>5.0</b>
	<b>Waste water</b>	<b>(159.1)</b>	<b>(259.7)</b>
	<b>Total</b>	<b>(154.5)</b>	<b>(254.7)</b>

We are incentivised to outperform the totex assumptions in order to drive future efficiencies which will help us achieve affordable bills in the future. Total cumulative expenditure restated to 2012/13 price base is £254.7m (7.8%) lower than allowed in the FD menu.

It is important to recognise the differences between service and expenditure performance in our Water service compared with our Waste water service.

Ofwat assessed our Waste water plan as efficient, but we have still worked hard to achieve service and expenditure outperformance and we are proud of the cumulative totex outperformance in Waste water of £259.7m shown above.

Ofwat assessed our Water plan as less efficient than they would expect and therefore targeted us to reduce our costs. Our cumulative totex position is broadly in line with Ofwat's assessment.

For both water and waste water services, the totex position is more complex than the headline figures in the 4B table above suggest, as explained below.

## Water service

Cumulative variations to plan (£m)	16/17	17/18
Increased spending on WTW, service reservoir and boreholes to improve drinking water quality	46	103
Increased spending on security at our sites	11	13
Contract efficiencies	(31)	(38)
Other efficiencies	(45)	(44)
Upward cost pressure (power)	11	13
<b>Total scope/efficiency difference</b>	<b>(8)</b>	<b>47</b>
Acceleration of the planned work on WTW, service reservoirs and boreholes	21	6
Delays to remainder of capital programme	(8)	(48)
<b>Total timing difference</b>	<b>13</b>	<b>(42)</b>
<b>Total difference to FD</b>	<b>5</b>	<b>5</b>

We have increased the level of activity on water quality and security between 2015 and 2018 because we know we need to do more to meet customers' expectations. Given our performance, we believe this has been the right course of action - we do not want to store up problems for the future. This has however resulted in some timing delays in other programmes within the water business.

We have delivered significant efficiency, using our established risk based investment approach, implementing innovative techniques and working with our supply chain to implement better ways of working - such as using pre-fabricated construction techniques to reduce the on-site implementation cost, and reduce overall construction time.

We have highlighted power cost pressures as this is the single largest operating cost pressure we face, although other operating costs have also risen this year, eroding some of the earlier efficiencies delivered.

## Waste Water service

Cumulative variations to plan (£m)	16/17	17/18
Increased spending on STW maintenance and WFD	0	18
Efficiency within FD (cumulative difference between plan and FD)	(54)	(81)
Efficient design and planning of private pumping station adoption	(17)	(24)
Contract efficiencies	(49)	(71)
Other efficiencies	(5)	(65)
Reduced energy costs due to self-generation (net of upward pressure)	(13)	(12)
<b>Total scope/efficiency difference</b>	<b>(138)</b>	<b>(235)</b>
Acceleration of the planned work on STW and sewer rehab	6	16
Delays to WFD programme	(27)	(41)
<b>Total timing difference</b>	<b>(21)</b>	<b>(25)</b>
<b>Total difference to FD</b>	<b>(159)</b>	<b>(260)</b>

We have spent around 16% less than the totex Ofwat assumed in the Final Determination, but at the same time we have increased activity on water framework directive to improve more rivers in our region than originally in our plan - our innovative incentive has allowed us this extra flexibility to work with the Environment Agency to do our fair share in 2015-20 rather than delaying improvements. The changes have led to us being a little behind on the programme but we're confident we can catch up over the next two years with the added benefit that we've aligned the improvements with our maintenance work to secure more efficient costs.

### Combining data, design and innovation to drive efficiency

Our approach does not focus on cost alone - quality plays an important part in our supply chain incentives. We are also investing in research and development and also encouraging all our people to come forward with novel ideas - we want to do things safer, better and faster. Our planning is also becoming more systems based - we're looking for solutions which solve more than one problem, enabled by the quality of our data and modelling. We're confident we can continue delivering efficiency, driving the frontier on waste and ensuring we make appropriate, balanced decisions on water.

Looking forward, we know we'll need to do more to meet our customers' expectations in 2020-25. We'll only be able to do this if we invest to improve now. We're confident enough in our delivery and efficiency plans to earmark an additional £100m to be reinvested back into our wholesale business over the next two years. We're excited to be investing in things like robotics, extra loggers across our network, and a new training academy - all designed to help improve our performance and set ourselves up responsibly for the future.

# 4C - Forecast impact of performance on RCV

Year ended 31 March 2018

Line description	Water	Waste water
	£m	£m
4C.1 Cumulative totex over/underspend so far in the price control period	5.8	(295.3)
4C.2 Customer share of cumulative totex over/underspend	0.0	0.0
4C.3 RCV element of customer share of cumulative totex over/underspend	2.2	(132.8)
4C.4 Adjustment for ODI rewards or penalties	0.0	0.0
4C.5 RCV determined at FD at 31 March	4181.1	4558.8
4C.6 Projected 'shadow' RCV	4183.3	4426.0

# 4D -Wholesale totex analysis (water)

Year ended 31 March 2018

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	
<b>A Operating expenditure</b>							
4D.1 Power	0.0	4.2	10.8	0.0	4.4	31.3	50.7
4D.2 Income treated as negative expenditure	0.0	(0.3)	0.0	0.0	0.0	0.0	(0.3)
4D.3 Abstraction charges/ discharge consents	11.3	0.0	0.0	0.0	0.0	0.0	11.3
4D.4 Bulk supply	0.0	9.0	0.0	0.0	3.1	0.0	12.1
4D.5 Other operating expenditure - renewals expensed in year (Infrastructure)	0.0	3.2	0.8	0.0	0.0	81.9	85.9
4D.6 Other operating expenditure - renewals expensed in year (Non-Infrastructure)	0.0	0.0	0.0	0.0	0.0	0.2	0.2
4D.7 Other operating expenditure - excluding renewals	0.0	14.6	6.5	0.0	47.6	87.8	156.5
4D.8 Local authority and Cumulo rates	0.0	2.1	0.6	0.9	15.7	30.0	49.3
<b>4D.9 Total operating expenditure excluding third party services</b>	<b>11.3</b>	<b>32.8</b>	<b>18.7</b>	<b>0.9</b>	<b>70.8</b>	<b>231.2</b>	<b>365.7</b>
4D.10 Third party services	0.0	2.6	0.2	0.0	1.7	0.9	5.4
<b>4D.11 Total operating expenditure</b>	<b>11.3</b>	<b>35.4</b>	<b>18.9</b>	<b>0.9</b>	<b>72.5</b>	<b>232.1</b>	<b>371.1</b>
<b>B Capital Expenditure</b>							
4D.12 Maintaining the long term capability of the assets - infra	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4D.13 Maintaining the long term capability of the assets - non-infra	0.0	13.4	0.0	0.5	72.1	55.1	141.1
4D.14 Other capital expenditure - infra	0.0	8.5	18.1	0.0	9.8	50.8	87.2
4D.15 Other capital expenditure - non-infra	0.0	17.4	23.5	0.0	24.4	19.4	84.7
4D.16 Infrastructure network reinforcement	0.0	0.0	0.0	0.0	0.0	8.1	8.1
4D.17 Total gross capital expenditure (excluding third party)	0.0	39.3	41.6	0.5	106.3	133.4	321.1
4D.18 Third party services	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4D.19 Total gross capital expenditure</b>	<b>0.0</b>	<b>39.3</b>	<b>41.6</b>	<b>0.5</b>	<b>106.3</b>	<b>133.4</b>	<b>321.1</b>
<b>C Grants and contributions</b>							
4D.20 Grants and contributions	0.0	(0.2)	0.0	0.0	(0.3)	(22.9)	(23.4)
<b>4D.21 Totex</b>	<b>11.3</b>	<b>74.5</b>	<b>60.5</b>	<b>1.4</b>	<b>178.5</b>	<b>342.6</b>	<b>668.8</b>
<b>D Cash Expenditure</b>							
4D.22 Pension deficit recovery payments	0.0	1.8	0.5	0.0	6.3	6.6	15.2
4D.23 Other cash items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4D.24 Totex including cash items</b>	<b>11.3</b>	<b>76.3</b>	<b>61.0</b>	<b>1.4</b>	<b>184.8</b>	<b>349.2</b>	<b>684.0</b>
<b>E Unit cost information (operating expenditure)</b>	<b>Units</b>						
4D.25 Licenced volume available	ML	982152					
4D.25 Volume abstracted	ML		614969				
4D.25 Volume transported	ML			723854			
4D.25 Average volume stored	ML				164169		
4D.25 Distribution input volume	ML					687211	
4D.25 Distribution input volume	ML						687211
4D.26 Unit cost	£/ML	11.54	57.31	26.18	5.20	105.41	337.85
4D.27 Population	000s	7973	7973	7973	7973	7973	7973
4D.28 Unit cost	£/pop	1.42	4.42	2.38	0.11	9.09	29.12

Other operating expenditure includes an exceptional pension gain of £3.4m.

The unit cost for each upstream service within tables 4D and 4E is calculated by dividing the total operating expenditure by the respective volumes. The calculation uses total operating expenditure values at 3 decimal places therefore the unit cost per service disclosed will differ from the unit cost calculated using the numbers above.

# 4E - Wholesale totex analysis (waste water)

Year ended 31 March 2018

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	
<b>A Operating expenditure</b>									
4E.1 Power	5.1	1.5	1.0	31.2	2.4	0.0	(10.7)	0.0	30.5
4E.2 Income treated as negative expenditure	0.0	0.0	0.0	0.0	0.0	0.0	(16.7)	(2.0)	(18.7)
4E.3 Discharge consents	2.8	0.8	0.5	5.5	0.0	0.0	0.0	0.0	9.6
4E.4 Bulk discharge	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4E.5 Other operating expenditure - renewals expensed in year (Infrastructure)	34.7	6.9	6.9	0.0	0.0	0.0	0.0	0.0	48.5
4E.6 Other operating expenditure - renewals expensed in year (Non-Infrastructure)	1.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	1.5
4E.7 Other operating expenditure - excluding renewals	28.8	8.3	5.5	69.5	0.8	7.5	28.4	13.0	161.8
4E.8 Local authority rates and Cumulo rates	0.1	0.0	0.0	20.5	2.6	0.0	5.0	0.0	28.2
<b>4E.9 Total operating expenditure excluding third party services</b>	<b>72.5</b>	<b>17.8</b>	<b>14.1</b>	<b>126.7</b>	<b>5.8</b>	<b>7.5</b>	<b>6.0</b>	<b>11.0</b>	<b>261.4</b>
4E.10 Third party services	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4
<b>4E.11 Total operating expenditure</b>	<b>72.7</b>	<b>17.9</b>	<b>14.2</b>	<b>126.7</b>	<b>5.8</b>	<b>7.5</b>	<b>6.0</b>	<b>11.0</b>	<b>261.8</b>
<b>B Capital Expenditure</b>									
4E.12 Maintaining the long term capability of the assets - infra	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4E.13 Maintaining the long term capability of the assets - non-infra	13.5	1.7	1.7	75.1	0.8	3.1	48.8	2.5	147.2
4E.14 Other capital expenditure - infra	17.2	19.3	19.3	1.7	0.0	0.0	0.0	0.0	57.5
4E.15 Other capital expenditure - non-infra	6.8	4.9	4.9	65.0	0.0	0.0	1.8	0.0	83.4
4E.16 Infrastructure network reinforcement	2.4	0.3	0.3	0.0	0.0	0.0	0.0	0.0	3.0
4E.17 Total gross capital expenditure (excluding third party services)	39.9	26.2	26.2	141.8	0.8	3.1	50.6	2.5	291.1
4E.18 Third party services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4E.19 Total gross capital expenditure</b>	<b>39.9</b>	<b>26.2</b>	<b>26.2</b>	<b>141.8</b>	<b>0.8</b>	<b>3.1</b>	<b>50.6</b>	<b>2.5</b>	<b>291.1</b>
<b>C Grants and contributions</b>									
4E.20 Grants and contributions	(10.6)	(1.3)	(1.3)	(0.2)	0.0	0.0	0.0	0.0	(13.4)
<b>4E.21 Totex</b>	<b>102.0</b>	<b>42.8</b>	<b>39.1</b>	<b>268.3</b>	<b>6.6</b>	<b>10.6</b>	<b>56.6</b>	<b>13.5</b>	<b>539.5</b>
<b>C Cash Expenditure</b>									
4E.22 Pension deficit recovery payments	2.0	0.6	0.4	5.8	0.1	0.0	1.5	1.1	11.5
4E.23 Other cash items	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4E.24 Totex including cash items</b>	<b>104.0</b>	<b>43.4</b>	<b>39.5</b>	<b>274.1</b>	<b>6.7</b>	<b>10.6</b>	<b>58.1</b>	<b>14.6</b>	<b>551.0</b>
<b>D Unit cost information (operating expenditure)</b>	<b>Units</b>								
4E.25 Volume collected	MI	1011903							
4E.25 Volume collected	MI	291094							
4E.25 Volume collected	MI	193136							
4E.25 Biochemical Oxygen Demand (BOD)	Tonnes	225142							
4E.25 Biochemical Oxygen Demand (BOD)	Tonnes	1072							
4E.25 Volume transported	m3	1543547							
4E.25 Dried solid mass treated	ttds	234							
4E.25 Dried solid mass disposed	ttds	138							
4E.26 Unit cost	£/unit	71.97	61.18	73.16	563.43	5324.88	4.85	25836.70	79867.54
4E.27 Population	000s	8954	8954	8954	8954	8954	8954	8954	8954
4E.28 Unit cost	£/pop	8.13	1.99	1.58	14.17	0.64	0.84	0.68	1.23

Other operating expenditure includes an exceptional pension gain of £2.6m.





# 4G - Wholesale current cost financial performance

Year ended 31 March 2018

Line description		Water	Waste water	Total
		£m	£m	£m
4G.1	Revenue	672.8	752.1	1424.9
4G.2	Operating expenditure	(371.0)	(261.9)	(632.9)
4G.3	Capital maintenance charges	(136.5)	(214.8)	(351.3)
4G.4	Other operating income	2.8	1.6	4.4
4G.5	Current cost operating profit	168.1	277.0	445.1
4G.6	Other income	6.7	12.2	18.9
4G.7	Interest income	1.4	1.4	2.8
4G.8	Interest expense	(107.2)	(116.8)	(224.0)
4G.9	Other interest expense	(6.8)	(7.4)	(14.2)
4G.10	Current cost profit before tax and fair value movements	62.2	166.4	228.6
4G.11	Fair value gains/(losses) on financial instruments	(3.4)	(3.8)	(7.2)
4G.12	Current cost profit before tax	58.8	162.6	221.4

# 4H - Financial metrics

As at 31 March 2018

Line description		Units	Metric
<b>A Financial indicators</b>			
4H.1	Net debt	£m	5375.4
4H.2	Regulated equity	£m	3364.6
4H.3	Regulated gearing	%	61.50%
4H.4	Post tax return on regulated equity	%	7.58%
4H.5	RORE (return on regulated equity)	%	9.30%
4H.6	Dividend yield	%	5.93%
4H.7	Retail profit margin - Household	%	2.34%
4H.8	Retail profit margin - Non household	%	(0.84%)
4H.9	Credit rating	Text	BBB+ [stable outlook]
4H.10	Return on RCV	%	5.70%
4H.11	Dividend cover	dec	1.09
4H.12	Funds from operations (FFO)	£m	614.9
4H.13	Interest cover (cash)	dec	4.53
4H.14	Adjusted interest cover (cash)	dec	2.36
4H.15	FFO/Debt	dec	0.11
4H.16	Effective tax rate	%	12.78%
4H.17	RCF	£m	415.2
4H.18	RCF/capex	dec	0.68
<b>B Revenue and earnings</b>			
4H.19	Revenue (actual)	£m	1530.6
4H.20	EBITDA (actual)	£m	803.3
<b>C Borrowings</b>			
4H.21	Proportion of borrowings which are fixed rate	%	48.38%
4H.22	Proportion of borrowings which are floating rate	%	26.95%
4H.23	Proportion of borrowings which are index linked	%	24.67%
4H.24	Proportion of borrowings due within 1 year or less	%	5.57%
4H.25	Proportion of borrowings due in more than 1 year but no more than 2 years	%	0.17%
4H.26	Proportion of borrowings due in more than 2 years but but no more than 5 years	%	14.16%
4H.27	Proportion of borrowings due in more than 5 years but no more than 20 years	%	57.70%
4H.28	Proportion of borrowings due in more than 20 years	%	22.40%

## Return on Regulated Equity (RoRE)

We continue to outperform the FD with a cumulative average RoRE of 9.3%, generated through continuing to perform well on customer ODI measures, totex and retail cost efficiencies as well as financing.

The table below outlines the key components of RoRE:

	2017/18 %	Amp6 to date %
Base return	5.6%	5.6%
Totex performance	0.6%	0.9%
Retail cost performance	0.3%	0.4%
RCV runoff performance	-0.1%	0.0%
ODI performance	2.3%	1.5%
Financing performance	2.8%	0.9%
<b>Regulatory return for the year</b>	<b>11.5%</b>	<b>9.3%</b>

## Base return

The FD base return of 5.7% has been adjusted 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. This results in reducing the base return to 5.6%.

## Totex performance

Total wholesale totex of £1075.5m in 2012/13 prices is £41.0m (4%) lower than assumed in the FD. Totex performance has been adjusted for timing differences relating to reported capital expenditure compared to the profile of spend in the FD explained further in table 4B (wholesale totex analysis). After sharing with customers and adjusting for tax, £18.0m of totex performance has been recognised in RoRE.

## Retail cost performance

Total retail operating cost performance after adjusting for tax results in outperformance of £10.1m in 2012/13 prices.

## ODI performance

A net reward of £65.0m after tax in 2012/13 prices for 'in AMP' measures has been recognised for the year.

## Financing performance

Higher inflation than Ofwat's FD inflation assumption which was used to set the FD cost of debt has resulted in our real cost of debt being 2.1% lower than the cost of debt assumed in the FD.

In addition, our low cost of debt also reflects the benefits of continued low interest rates on new and refinanced debt as a result of actions we have taken to replace high cost fixed rate debt with new low cost debt. We also continue to have a lower debt requirement than assumed in the FD.

# 4I - Financial derivatives

Year ended 31 March 2018

Line description	Nominal value by maturity (net)			Total value at 31 March 2018		Total accretion at 31 March 2018	Interest rate (weighted average for 12 months to 31 March 2018)	
	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	%	%
<b>Derivative type</b>								
<b>A Interest rate swap (sterling)</b>								
4I.1 Floating to fixed rate	0.0	0.0	771.7	771.7	(104.1)	0.0	5.1%	0.8%
4I.2 Floating from fixed rate	0.0	0.0	625.0	625.0	10.8	0.0	2.1%	3.0%
4I.3 Floating to index linked	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.4 Floating from index linked	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.5 Fixed to index-linked	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.6 Fixed from index-linked	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
<b>4I.7 Total</b>	<b>0.0</b>	<b>0.0</b>	<b>1396.7</b>	<b>1396.7</b>	<b>(93.3)</b>	<b>0.0</b>		
<b>B Foreign Exchange</b>								
4I.8 Cross currency swap USD	0.0	0.0	98.4	98.4	5.9	0.0	2.2%	3.7%
4I.9 Cross currency swap EUR	0.0	0.0	11.4	11.4	10.4	0.0	1.2%	4.2%
4I.10 Cross currency swap YEN	0.0	0.0	8.5	8.5	8.3	0.0	1.2%	2.6%
4I.11 Cross currency swap Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
<b>4I.12 Total</b>	<b>0.0</b>	<b>0.0</b>	<b>118.3</b>	<b>118.3</b>	<b>24.6</b>	<b>0.0</b>		
<b>C Currency interest rate</b>								
4I.13 Currency interest rate swaps USD	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.14 Currency interest rate swaps EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.15 Currency interest rate swaps YEN	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.16 Currency interest rate swaps Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
<b>4I.17 Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>		
<b>D Forward currency contracts</b>								
4I.18 Forward currency contracts USD	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.19 Forward currency contracts EUR	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.20 Forward currency contracts YEN	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
4I.21 Forward currency contracts Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0%	0.0%
<b>4I.22 Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>		
<b>E Other financial derivatives</b>								
4I.23 Other financial derivatives	0.0	0.0	150.0	150.0	(3.3)	0.0	0.0%	0.0%
<b>F Total</b>								
<b>4I.24 Total financial derivatives</b>	<b>0.0</b>	<b>0.0</b>	<b>1665.0</b>	<b>1665.0</b>	<b>(72.0)</b>	<b>0.0</b>		

Other financial derivatives include inflation swaps of £2.8m and energy swaps of £0.5m.

# 4J - Atypical expenditure by business unit - Wholesale water

Year ended 31 March 2018

Line description	Water resources			Network+			Total £m
	Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution	
	£m	£m	£m	£m	£m	£m	
<b>A Operating expenditure (excl. atypicals)</b>							
4J.1 Power	0.0	4.2	10.8	0.0	4.4	31.3	50.7
4J.2 Income treated as negative expenditure	0.0	(0.3)	0.0	0.0	0.0	0.0	(0.3)
4J.3 Abstraction charges/ discharge consents	11.3	0.0	0.0	0.0	0.0	0.0	11.3
4J.4 Bulk supply	0.0	9.0	0.0	0.0	3.1	0.0	12.1
<b>Other operating expenditure</b>							
4J.5 - Renewals expensed in year (Infrastructure)	0.0	3.2	0.8	0.0	0.0	81.9	85.9
4J.6 - Renewals expensed in year (Non-Infrastructure)	0.0	0.0	0.0	0.0	0.0	0.2	0.2
4J.7 - Other operating expenditure excluding renewals	0.0	15.0	6.6	0.0	49.0	89.3	159.9
4J.8 Local authority and Cumulo rates	0.0	2.1	0.6	0.9	15.7	30.0	49.3
<b>4J.9 Total operating expenditure (excluding third party services)</b>	<b>11.3</b>	<b>33.2</b>	<b>18.8</b>	<b>0.9</b>	<b>72.2</b>	<b>232.7</b>	<b>369.1</b>
4J.10 Third party services	0.0	2.6	0.2	0.0	1.7	0.9	5.4
<b>4J.11 Total operating expenditure</b>	<b>11.3</b>	<b>35.8</b>	<b>19.0</b>	<b>0.9</b>	<b>73.9</b>	<b>233.6</b>	<b>374.5</b>
<b>B Capital expenditure (excl. atypicals)</b>							
4J.12 Maintaining the long term capability of the assets - infra	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.13 Maintaining the long term capability of the assets - non-infra	0.0	13.4	0.0	0.5	72.1	55.1	141.1
4J.14 Other capital expenditure - infra	0.0	8.5	18.1	0.0	9.8	50.8	87.2
4J.15 Other capital expenditure - non-infra	0.0	17.4	23.5	0.0	24.4	19.4	84.7
4J.16 Infrastructure network reinforcement	0.0	0.0	0.0	0.0	0.0	8.1	8.1
4J.17 Total gross capital expenditure excluding third party services	0.0	39.3	41.6	0.5	106.3	133.4	321.1
4J.18 Third party services	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4J.19 Total gross capital expenditure</b>	<b>0.0</b>	<b>39.3</b>	<b>41.6</b>	<b>0.5</b>	<b>106.3</b>	<b>133.4</b>	<b>321.1</b>
4J.20 Grants and contributions	0.0	(0.2)	0.0	0.0	(0.3)	(22.9)	(23.4)
<b>4J.21 Totex</b>	<b>11.3</b>	<b>74.9</b>	<b>60.6</b>	<b>1.4</b>	<b>179.9</b>	<b>344.1</b>	<b>672.2</b>
<b>C Cash expenditure (excl. atypicals)</b>							
4J.22 Pension deficit recovery payments	0.0	1.8	0.5	0.0	6.3	6.6	15.2
4J.23 Other cash items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4J.24 Totex including cash items</b>	<b>11.3</b>	<b>76.7</b>	<b>61.1</b>	<b>1.4</b>	<b>186.2</b>	<b>350.7</b>	<b>687.4</b>
<b>D Atypical expenditure</b>							
4J.25 Pension Increase Exchange arrangement gain	0.0	(0.4)	(0.1)	0.0	(1.4)	(1.5)	(3.4)
4J.26 Item 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.27 Item 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.28 Item 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.29 Item 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.30 Item 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.31 Item 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.32 Item 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.33 Item 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4J.34 Item 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>4J.35 Total atypical expenditure</b>	<b>0.0</b>	<b>(0.4)</b>	<b>(0.1)</b>	<b>0.0</b>	<b>(1.4)</b>	<b>(1.5)</b>	<b>(3.4)</b>
<b>E Total expenditure</b>							
<b>4J.36 Total expenditure</b>	<b>11.3</b>	<b>76.3</b>	<b>61.0</b>	<b>1.4</b>	<b>184.8</b>	<b>349.2</b>	<b>684.0</b>

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

Year ended 31 March 2018

		Network+ Sewage Collection			Network+ Sewage Treatment		Sludge			
Line description		Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal	Total
		£m	£m	£m	£m	£m	£m	£m	£m	£m
A	Operating expenditure (excl. atypicals)									
4K.1	Power	5.1	1.5	1.0	31.2	2.4	0.0	(10.7)	0.0	30.5
4K.2	Income treated as negative expenditure	0.0	0.0	0.0	0.0	0.0	0.0	(16.7)	(2.0)	(18.7)
4K.3	Discharge Consents	2.8	0.8	0.5	5.5	0.0	0.0	0.0	0.0	9.6
4K.4	Bulk discharge	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other operating expenditure									
4K.5	Renewals expensed in year (Infrastructure)	34.8	6.9	6.9	(0.1)	0.0	0.0	0.0	0.0	48.5
4K.6	Renewals expensed in year (NonInfrastructure)	1.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	1.5
4K.7	Other operating expenditure excluding renewals	28.8	8.4	6.0	71.0	0.8	6.9	25.2	13.2	160.3
4K.8	Local authority and Cumulo rates	0.1	0.0	0.0	20.5	2.6	0.0	5.0	0.0	28.2
4K.9	Total operating expenditure (excluding third party services)	72.6	17.9	14.6	128.1	5.8	6.9	2.8	11.2	259.9
4K.10	Third party services	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.4
4K.11	Total operating expenditure	72.8	18.0	14.7	128.1	5.8	6.9	2.8	11.2	260.3
B	Capital expenditure (excl. atypicals)									
4K.12	Maintaining the long term capability of the assets infra	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.13	Maintaining the long term capability of the assets noninfra	13.5	1.7	1.7	75.1	0.8	3.1	48.8	2.5	147.2
4K.14	Other capital expenditure infra	17.2	19.3	19.3	1.7	0.0	0.0	0.0	0.0	57.5
4K.15	Other capital expenditure noninfra	6.8	4.9	4.9	65.0	0.0	0.0	1.8	0.0	83.4
4K.16	Infrastructure network reinforcement	2.4	0.3	0.3	0.0	0.0	0.0	0.0	0.0	3.0
4K.17	Total gross capital expenditure excluding third party services	39.9	26.2	26.2	141.8	0.8	3.1	50.6	2.5	291.1
4K.18	Third party services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.19	Total gross capital expenditure	39.9	26.2	26.2	141.8	0.8	3.1	50.6	2.5	291.1
4K.20	Grants and contributions	(10.6)	(1.3)	(1.3)	(0.2)	0.0	0.0	0.0	0.0	(13.4)
4K.21	Totex	102.1	42.9	39.6	269.7	6.6	10.0	53.4	13.7	538.0
C	Cash expenditure (excl. atypicals)									
4K.22	Pension deficit recovery payments	2.0	0.6	0.4	5.8	0.1	0.0	1.5	1.1	11.5
4K.23	Other cash items	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.24	Totex including cash items	104.1	43.5	40.0	275.5	6.7	10.0	54.9	14.8	549.5
D	Atypical expenditure									
4K.25	Pension Increase Exchange arrangement gain	(0.1)	(0.1)	(0.5)	(1.4)	0.0	0.0	(0.3)	(0.2)	(2.6)
4K.26	Bioresources decommissioning	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	2.0
4K.27	Bioresources restructuring	0.0	0.0	0.0	0.0	0.0	0.6	1.5	0.0	2.1
4K.28	Item 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.29	Item 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.30	Item 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.31	Item 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.32	Item 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.33	Item 9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.34	Item 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4K.35	Total atypical expenditure	(0.1)	(0.1)	(0.5)	(1.4)	0.0	0.6	3.2	(0.2)	1.5
E	Total expenditure									
4K.36	Total expenditure	104.0	43.4	39.5	274.1	6.7	10.6	58.1	14.6	551.0

# 4L - Enhancement expenditure by purpose - Wholesale water

Year ended 31 March 2018

Line description	Expenditure in		
	Water resources		
	Abstraction licences	Raw water abstraction	Raw water transport
	£m	£m	£m
<b>A</b> Enhancement expenditure by purpose			
4L.1 NEP - Making ecological improvements at abstractions (Habitats Directive, SSSI, NERC, BAPs)	0.0	0.0	0.0
4L.2 NEP - Eels Regulations (measures at intakes)	0.0	1.0	0.0
4L.3 Addressing low pressure	0.0	0.0	0.0
4L.4 Improving taste/odour/colour	0.0	0.0	0.0
4L.5 Meeting lead standards	0.0	0.0	0.0
4L.6 Supply side enhancements to the supply/demand balance (dry year critical/peak conditions)	0.0	0.0	0.0
4L.7 Supply side enhancements to the supply/demand balance (dry year annual average conditions)	0.0	0.3	0.0
4L.8 Demand side enhancements to the supply/demand balance (dry year critical/peak conditions)	0.0	0.0	0.0
4L.9 Demand side enhancements to the supply/demand balance (dry year annual average conditions)	0.0	0.0	0.0
4L.10 New developments	0.0	0.0	0.0
4L.11 New connections element of new development (CPs, meters)	0.0	0.0	0.0
4L.12 Investment to address raw water deterioration (THM, nitrates, Crypto, pesticides, others)	0.0	0.0	0.0
4L.13 Resilience	0.0	19.3	41.4
4L.14 SEMD	0.0	1.0	0.2
4L.15 NEP - Investigations	0.0	1.6	0.0
4L.16 Improvements to river flows	0.0	1.6	0.0
4L.17 Metering (excluding cost of providing metering to new service connections) - meters requested by optants	0.0	0.0	0.0
4L.18 Metering (excluding cost of providing metering to new service connections)- meters introduced by companies	0.0	0.0	0.0
4L.19 Metering (excluding cost of providing metering to new service connections) - other	0.0	0.0	0.0
4L.20 Reservoir safety	0.0	1.1	0.0
<b>4L.35 Total enhancement capital expenditure</b>	<b>0.0</b>	<b>25.9</b>	<b>41.6</b>

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
0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	0.0	1.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	2.5	2.5	0.0	0.0	0.0		0.0	0.0	2.5	2.5
0.0	0.5	0.6	1.1	0.0	0.0	0.0		0.0	0.5	0.6	1.1
0.0	0.0	2.4	2.4	0.0	0.0	0.0		0.0	0.0	2.4	2.4
0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	0.8	1.1	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	32.0	32.0	0.0	0.0	0.0		0.0	0.0	32.0	32.0
0.0	0.0	15.5	15.5	0.0	0.0	0.0		0.0	0.0	15.5	15.5
0.0	3.7	0.7	4.4	0.0	0.0	0.0		0.0	3.7	0.7	4.4
0.0	22.4	17.1	100.2	0.0	0.1	17.3		0.0	1.9	13.9	33.2
0.0	7.0	1.6	9.8	0.0	0.1	0.1		0.0	0.4	0.0	0.6
0.0	0.6	0.0	2.2	0.0	1.6	0.0		0.0	0.6	0.0	2.2
0.0	0.0	0.0	1.6	0.0	1.6	0.0		0.0	0.0	0.0	1.6
0.0	0.0	5.1	5.1	0.0	0.0	0.0		0.0	0.0	5.1	5.1
0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
0.0	0.0	0.0	1.1	0.0	1.1	0.0		0.0	0.0	0.0	1.1
0.0	34.2	78.3	180.0	0.0	4.5	17.4		0.0	7.1	72.7	101.7



# 4M - Enhancement expenditure by purpose - Wholesale waste water

Year ended 31 March 2018

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
<b>A</b>	<b>Enhancement capital expenditure by purpose</b>						
4M.1	First time sewerage (s101A)	1.4	0.0	0.0	0.0	0.0	0.0
4M.2	Sludge enhancement (quality)	0.0	0.0	0.0	0.0	0.0	0.0
4M.3	Sludge enhancement (growth)	0.0	0.0	0.0	0.0	0.0	0.0
4M.4	NEP - Conservation drivers	0.0	0.0	0.0	0.0	0.0	0.0
4M.5	NEP - Eels Regulations (measures at outfalls)	0.0	0.0	0.0	0.0	0.0	0.0
4M.6	NEP - Event Duration Monitoring at intermittent discharges	1.5	0.2	0.2	0.0	0.0	0.0
4M.7	NEP - Flow monitoring at sewage treatment works	0.0	0.0	0.0	0.6	0.0	0.0
4M.8	NEP - Monitoring of pass forward flows at CSOs	0.0	0.0	0.0	0.0	0.0	0.0
4M.9	NEP - Schemes to increase flow to full treatment	0.0	0.0	0.0	0.0	0.0	0.0
4M.10	NEP - Schemes to increase storm tank capacity	0.0	0.0	0.0	0.0	0.0	0.0
4M.11	NEP - Storage schemes to reduce spill frequency at CSOs, storm tanks, etc	0.0	0.0	0.0	0.0	0.0	0.0
4M.12	NEP - Chemicals monitoring/ investigations/ options appraisals	0.0	0.0	0.0	1.4	0.0	0.0
4M.13	NEP - National phosphorus removal technology investigations	0.0	0.0	0.0	0.0	0.0	0.0
4M.14	NEP - Groundwater schemes	0.0	0.0	0.0	0.0	0.0	0.0
4M.15	NEP - Investigations	0.0	0.0	0.0	0.0	0.0	0.0
4M.16	NEP - Nutrients (N removal)	0.0	0.0	0.0	0.0	0.0	0.0
4M.17	NEP - Nutrients (P removal at activated sludge STWs)	0.0	0.0	0.0	13.8	0.0	0.0
4M.18	NEP - Nutrients (P removal at filter bed STWs)	0.0	0.0	0.0	28.0	0.0	0.0
4M.19	NEP - Reduction of sanitary parameters	0.0	0.0	0.0	7.9	0.0	0.0
4M.20	NEP - UV disinfection (or similar)	0.0	0.0	0.0	0.0	0.0	0.0
4M.21	NEP - Discharge relocation	0.0	0.0	0.0	0.0	0.0	0.0
4M.22	NEP - Flow 1 schemes	0.0	0.0	0.0	0.0	0.0	0.0
4M.23	Odour	0.0	0.0	0.0	0.9	0.0	0.0
4M.24	New development and growth	4.7	0.6	0.6	0.0	0.0	0.0
4M.25	Growth at sewage treatment works (excluding sludge treatment)	0.0	0.0	0.0	10.6	0.0	0.0
4M.26	Resilience	0.0	0.0	0.0	0.0	0.0	0.0
4M.27	SEMD	0.0	0.0	0.0	0.0	0.0	0.0
4M.28	Reduce flooding risk for properties	0.0	21.9	21.9	0.0	0.0	0.0
4M.29	Pollution control strategy (ESL)	0.5	0.0	0.0	0.1	0.0	0.0
4M.30	Transferred private sewers and pumping stations	14.1	1.8	1.8	0.0	0.0	0.0
4M.31	Improvements to existing permit compliance	0.3	0.0	0.0	3.0	0.0	0.0
4M.32	Non-NEP Quality improvements (voluntary WFD improvement a co-benefit to CM and SDB scheme)	0.9	0.0	0.0	0.4	0.0	0.0
4M.33	Non-NEP investigations into CSOs to inform AMP7 WFD intermittents programme	3.0	0.0	0.0	0.0	0.0	0.0
<b>4M.44</b>	<b>Total enhancement capital expenditure</b>	<b>26.4</b>	<b>24.5</b>	<b>24.5</b>	<b>66.7</b>	<b>0.0</b>	<b>0.0</b>

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
	0.0	0.0	1.4	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
	0.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.5
	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.9	1.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.2
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	13.8	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	4.5
	0.0	0.0	28.0	0.0	0.0	0.0	18.9	0.0	0.0	0.0	0.0	18.9
	0.0	0.0	7.9	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0	3.7
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	5.9	4.7	0.6	0.6	0.0	0.0	0.0	0.0	0.0	5.9
	0.0	0.0	10.6	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	7.5
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	43.8	0.0	6.1	6.1	0.0	0.0	0.0	0.0	0.0	12.2
	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	17.7	14.1	1.8	1.8	0.0	0.0	0.0	0.0	0.0	17.7
	0.0	0.0	3.3	0.3	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.3
	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.8	0.0	143.9	23.8	8.6	8.6	37.6	0.0	0.0	1.8	0.0	80.4

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

Year ended 31 March 2018

Line description		Network+	Sludge	Total
		£000	£000	£000
4N.1	Direct costs of STWs in size band 1	4331.9		4331.9
4N.2	Direct costs of STWs in size band 2	2389.5		2389.5
4N.3	Direct costs of STWs in size band 3	7332.6		7332.6
4N.4	Direct costs of STWs in size band 4	12717.4		12717.4
4N.5	Direct costs of STWs in size band 5	11944.7		11944.7
4N.6	General & support costs of STWs in size bands 1 to 5	5479.7		5479.7
4N.7	Direct costs of STWs in size band 6	57453.2		57453.2
4N.8	General & support costs of STWs in size band 6	8695.6		8695.6
4N.9	Service charges for STWs in size band 6	1814.9		1814.9
4N.10	Estimated terminal pumping costs size band 6 works	0.0		0.0
4N.11	Estimated sludge costs size band 6 works			0.0
<b>4N.12</b>	<b>Total operating expenditure (excluding 3rd party services)</b>	<b>110344.6</b>		<b>110344.6</b>

# 40 - Large sewage treatment works - waste water

Year ended 31 March 2018

Line description		Units	STWNAMED01	STWNAMED02	STWNAMED03	STWNAMED04	STWNAMED05	STWNAMED06	STWNAMED07	STWNAMED08
<b>A</b> Sewage treatment works - Explanatory variables										
40.1	Works name	text	ABBEY LATHE - MALTBY (WRW)	ALFRETON (WRW)	BARNHURST (STW)	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	33.67	38.98	142.45	60.65	72.95	60.83	42.56	62.74
40.4	Suspended solids consent	mg/l	20	25	15	25	45	20	45	25
40.5	BOD <sub>5</sub> 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	2
40.8	UV consent	mW/s/cm <sup>2</sup>	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD <sub>5</sub> /d	2020	2339	8547	3639	4377	3650	2554	3764
40.10	Flow passed to full treatment	m <sup>3</sup> /d	6,443	9,504	43,836	10,573	21,252	11,455	8,113	16,746
<b>B</b> Sewage treatment works - Operating expenditure										
40.11	Direct expenditure	£000	190	428	1638	520	504	661	248	380
40.12	General and support expenditure	£000	27	64	241	78	76	101	37	57
40.13	Functional expenditure	£000	217	492	1879	598	580	762	285	437
40.14	Service charges	£000	18	19	99	18	18	18	11	19
40.15	Estimated terminal pumping expenditure	£000	0	0	0	0	0	0	0	0

Line description		Units	STWNAMED09	STWNAMED10	STWNAMED11	STWNAMED12	STWNAMED13	STWNAMED14	STWNAMED15	STWNAMED16
<b>A</b> 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	N/A
40.3	Population equivalent of total load received	000	48.59	356.27	72.40	248.47	27.05	54.04	319.00	0.00
40.4	Suspended solids consent	mg/l	25	45	45	40	15	45	30	0
40.5	BOD <sub>5</sub> consent	mg/l	15	25	25	20	10	25	20	0
40.6	Ammonia consent	mg/l	5	10	10	5	3	15	3	0
40.7	Phosphorus consent	mg/l	0	1	0	1	0	2	1	0
40.8	UV consent	mW/s/cm <sup>2</sup>	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD <sub>5</sub> /d	2915	21376	4344	14908	1623	3242	19140	0
40.10	Flow passed to full treatment	m <sup>3</sup> /d	13,287	37,382	20,022	65,262	6,605	8,304	88,094	0
<b>B</b> Sewage treatment works - Operating expenditure										
40.11	Direct expenditure	£000	497	946	455	1918	311	614	1686	0
40.12	General and support expenditure	£000	75	145	69	292	46	93	242	0
40.13	Functional expenditure	£000	571	1090	524	2210	357	707	1928	0
40.14	Service charges	£000	18	20	12	49	19	18	138	0
40.15	Estimated terminal pumping expenditure	£000	0	0	0	0	0	0	0	0

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

Year ended 31 March 2018

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	TB2	TB2	TA2	TA2	TA2
40.3	Population equivalent of total load received	000	435.45	109.76	130.56	34.02	48.02	48.69	105.57	29.08
40.4	Suspended solids consent	mg/l	20	30	20	20	30	20	30	25
40.5	BOD <sub>5</sub> 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 <sup>2</sup>	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD <sub>5</sub> /d	26127	6585	7834	2041	2881	2921	6334	1745
40.10	Flow passed to full treatment	m <sup>3</sup> /d	147,850	28,319	37,790	10,538	15,731	10,295	25,123	6,080

## B Sewage treatment works - Operating expenditure

40.11	Direct expenditure	£000	2777	898	1103	479	540	486	933	341
40.12	General and support expenditure	£000	429	135	167	72	81	73	141	50
40.13	Functional expenditure	£000	3205	1033	1271	550	622	559	1074	391
40.14	Service charges	£000	33	32	32	19	20	18	32	19
40.15	Estimated terminal pumping expenditure	£000	0	0	0	0	0	0	0	0

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	N/A	TB2	TA2	TA2	TA2	TA2
40.3	Population equivalent of total load received	000	46.48	95.36	0.00	136.01	77.01	276.25	97.76	139.15
40.4	Suspended solids consent	mg/l	20	30	0	45	25	20	20	30
40.5	BOD <sub>5</sub> 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 <sup>2</sup>	0	0	0	0	0	0	0	0
40.9	Load received by STW	kgBOD <sub>5</sub> /d	2789	5722	0	8161	4621	16575	5866	8349
40.10	Flow passed to full treatment	m <sup>3</sup> /d	12,289	28,908	0	38,460	25,456	64,032	23,939	21,236

## B Sewage treatment works - Operating expenditure

40.11	Direct expenditure	£000	536	969	0	669	882	1638	893	947
40.12	General and support expenditure	£000	81	152	0	100	133	247	134	143
40.13	Functional expenditure	£000	617	1121	0	769	1015	1885	1027	1090
40.14	Service charges	£000	19	0	0	31	32	61	33	33
40.15	Estimated terminal pumping expenditure	£000	0	0	0	0	0	0	0	0

[illegible][illegible]

Year ended 31 March 2018

A Sewage treatment works - Explanatory variables

B	Sewage treatment works - Operating expenditure
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A Sewage treatment works - Explanatory variables

B Sewage treatment works - Operating expenditure

[illegible]

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

Year ended 31 March 2018

Line	Line description	Units	Current year
<b>A</b>	<b>Water resources</b>		
4P.1	Proportion of distribution input derived from impounding reservoirs	Propn 0 to 1	0.259
4P.2	Proportion of distribution input derived from pumped storage reservoirs	Propn 0 to 1	0.136
4P.3	Proportion of distribution input derived from river abstractions	Propn 0 to 1	0.320
4P.4	Proportion of distribution input derived from groundwater works,excluding managed aquifer recharge [MAR] water supply schemes	Propn 0 to 1	0.285
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	Number of impounding reservoirs	nr	10
4P.8	Number of pumped storage reservoirs	nr	10
4P.9	Number of river abstractions	nr	6
4P.10	Number of groundwater works excluding managed aquifer recharge [MAR] water supply schemes	nr	104
4P.11	Number of artificial recharge [AR] water supply schemes	nr	0
4P.12	Number of aquifer storage and recovery [ASR] water supply schemes	nr	0
4P.13	Total number of sources	nr	130
4P.14	Total number of water reservoirs	nr	25
4P.15	Total capacity of water reservoirs	ML	264065
4P.16	Total number of intake and source pumping stations	nr	241
4P.17	Total number of raw water transfer stations	nr	5
4P.18	Total capacity of intake and source pumping stations	kW	56320
4P.19	Total capacity of raw water transfer pumping stations	kW	3961
4P.20	Total length of raw water mains and conveyors	km	665.96
4P.21	Average pumping head - resources	m.hd	12.05
4P.22	Average pumping head - raw water transport	m.hd	33.05
<b>B</b>	<b>Water treatment</b>		
4P.23	Total water treated at all SW simple disinfection works	ML/d	0.00
4P.24	Total water treated at all SW1 works	ML/d	0.00
4P.25	Total water treated at all SW2 works	ML/d	0.00
4P.26	Total water treated at all SW3 works	ML/d	194.41
4P.27	Total water treated at all SW4 works	ML/d	1126.03
4P.28	Total water treated at all SW5 works	ML/d	58.70
4P.29	Total water treated at all SW6 works	ML/d	0.00
4P.30	Total water treated at all GW simple disinfection works	ML/d	144.71
4P.31	Total water treated at all GW1 works	ML/d	22.58
4P.32	Total water treated at all GW2 works	ML/d	13.41
4P.33	Total water treated at all GW3 works	ML/d	0.79
4P.34	Total water treated at all GW4 works	ML/d	278.76
4P.35	Total water treated at all GW5 works	ML/d	88.71
4P.36	Total water treated at all GW6 works	ML/d	0.00
4P.37	Total water treated at more than one type of works	ML/d	0.00
4P.38	Total number of SW simple disinfection works	nr	0
4P.39	Total number of SW1 works	nr	0
4P.40	Total number of SW2 works	nr	0
4P.41	Total number of SW3 works	nr	2
4P.42	Total number of SW4 works	nr	14
4P.43	Total number of SW5 works	nr	2
4P.44	Total number of SW6 works	nr	0
4P.45	Total number of GW simple disinfection works	nr	37
4P.46	Total number of GW1 works	nr	5
4P.47	Total number of GW2 works	nr	3
4P.48	Total number of GW3 works	nr	1
4P.49	Total number of GW4 works	nr	58
4P.50	Total number of GW5 works	nr	10
4P.51	Total number of GW6 works	nr	0
4P.52	Number of treatment works requiring remedial action because of raw water deterioration	nr	0
4P.53	Zonal population receiving water treated with orthophosphate	000	6790.607
4P.54	Average pumping head - treatment	m.hd	12.70



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

Year ended 31 March 2018

C Water distribution			
4P.55	Total length of potable mains as at 31 March	km	47151.4
4P.56	Total length of mains relined	km	2.9
4P.57	Total length of mains renewed	km	119.2
4P.58	Total length of new mains	km	116.6
4P.59	Potable water mains (<320mm)	km	43228.0
4P.60	Potable water mains 320mm - 450mm	km	1999.2
4P.61	Potable water mains 450mm - 610mm	km	882.9
4P.62	Potable water mains > 610mm	km	1041.3
4P.63	Total length of non-potable and partially treated main for supplying customers	km	69.8
4P.64	Total length of non-potable and partially treated main for treatment	km	12.5
4P.65	Capacity of booster pumping stations	kW	109997
4P.66	Capacity of service reservoirs	ML	3059
4P.67	Capacity of water towers	ML	9
4P.68	Distribution input	ML/d	1876.95
4P.69	Water delivered (non-potable)	ML/d	0.32
4P.70	Water delivered (potable)	ML/d	1542.41
4P.71	Water delivered (billed measured residential)	ML/d	427.90
4P.72	Water delivered (billed measured business)	ML/d	357.53
4P.73	Total leakage	ML/d	442.52
4P.74	Distribution losses	ML/d	328.79
4P.75	Water taken unbilled	ML/d	50.54
4P.76	Number of lead communication pipes	nr	630263
4P.77	Number of galvanised iron communication pipes	nr	160335
4P.78	Number of other communication pipes	nr	2798118
4P.79	Number of booster pumping stations	nr	765
4P.80	Total number of service reservoirs	nr	553
4P.81	Number of water towers	nr	18
4P.82	Total length of mains laid or structurally refurbished pre-1880	km	27.8
4P.83	Total length of mains laid or structurally refurbished between 1881 and 1900	km	224.1
4P.84	Total length of mains laid or structurally refurbished between 1901 and 1920	km	4098.2
4P.85	Total length of mains laid or structurally refurbished between 1921 and 1940	km	5092.2
4P.86	Total length of mains laid or structurally refurbished between 1941 and 1960	km	5172.9
4P.87	Total length of mains laid or structurally refurbished between 1961 and 1980	km	10045.0
4P.88	Total length of mains laid or structurally refurbished between 1981 and 2000	km	15812.8
4P.89	Total length of mains laid or structurally refurbished post 2001	km	7521.7
4P.90	Average pumping head - distribution	m.hd	93.77
D Band Disclosure (nr)			
4P.91	WTWs in size band 1	Nr	42
4P.92	WTWs in size band 2	Nr	21
4P.93	WTWs in size band 3	Nr	28
4P.94	WTWs in size band 4	Nr	18
4P.95	WTWs in size band 5	Nr	12
4P.96	WTWs in size band 6	Nr	5
4P.97	WTWs in size band 7	Nr	2
4P.98	WTWs in size band 8	Nr	4
E Band Disclosure (%)			
4P.99	Proportion of Total DI band 1	%	1.6%
4P.100	Proportion of Total DI band 2	%	3.2%
4P.101	Proportion of Total DI band 3	%	8.6%
4P.102	Proportion of Total DI band 4	%	10.0%
4P.103	Proportion of Total DI band 5	%	13.6%
4P.104	Proportion of Total DI band 6	%	11.0%
4P.105	Proportion of Total DI band 7	%	8.3%
4P.106	Proportion of Total DI band 8	%	43.8%

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

Year ended 31 March 2018

Line description		Units	Current year
<b>A Properties and population</b>			
4Q.1	Residential properties billed for measured water (external meter)	000	691.200
4Q.2	Residential properties billed for measured water (not external meter)	000	743.747
4Q.3	Business properties billed measured water	000	157.945
4Q.4	Residential properties billed for unmeasured water	000	1796.724
4Q.5	Business properties billed unmeasured water	000	9.286
4Q.6	Total business connected properties at year end	000s	190.235
4Q.7	Total residential connected properties at year end	000s	3398.481
4Q.8	Total connected properties at year end	000	3588.716
4Q.9	Number of residential meters renewed	000	107.030
4Q.10	Number of business meters renewed	000s	2.355
4Q.11	Number of meters installed at request of optants	000	32.484
4Q.12	Number of selective meters installed	000	0.000
4Q.13	Total number of new business connections	000	1.064
4Q.14	Total number of new residential connections	000	22.126
4Q.15	Total population served	000	7973.387
4Q.16	Number of business meters (billed properties)	000	180.523
4Q.17	Number of residential meters (billed properties)	000	1603.168
4Q.18	Company area	km2	19706
<b>B Other</b>			
4Q.19	Number of lead communication pipes replaced for water quality	nr	887
4Q.20	Total supply side enhancements to the supply demand balance (dry year critical/peak conditions)	ML/d	5.21
4Q.21	Total supply side enhancements to the supply demand balance (dry year annual average conditions)	ML/d	5.21
4Q.22	Total demand side enhancements to the supply demand balance (dry year critical/peak conditions)	ML/d	1.65
4Q.23	Total demand side enhancements to the supply demand balance (dry year annual average conditions)	ML/d	1.65
4Q.24	Energy consumption - network plus	MWh	479410
4Q.25	Energy consumption - water resources	MWh	46584
4Q.26	Energy consumption - wholesale	MWh	525994
4Q.27	Peak factor	%	104.36%
4Q.28	Mean Zonal Compliance	%	99.96%
4Q.29	Volume of Leakage above or below the sustainable economic Level	ML	5.520

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

Year ended 31 March 2018

Line	Item description	Unit	Current year
A	Waste water network		
4R.1	Connectable properties served by s101A schemes completed in the report year	nr	32
4R.2	Number of s101A schemes completed in the report year	Nr	4
4R.3	Total pumping station capacity	kW	104862
4R.4	Number of network pumping stations	nr	4468
4R.5	Total number of sewer blockages	nr	45401
4R.6	Total number of gravity sewer collapses	nr	361
4R.7	Total number of sewer rising main bursts/collapses	nr	127
4R.8	Number of combined sewer overflows	nr	2980
4R.9	Number of emergency overflows	nr	746
4R.10	Number of settled storm overflows	nr	311
4R.11	Sewer age profile (constructed post 2001)	km	6664
4R.12	Volume of trade effluent	ML/d	83.63
4R.13	Volume of waste water receiving treatment at sewage treatment works	ML/yr	1011902.81
4R.14	Length of gravity sewers rehabilitated	km	32
4R.15	Length of rising mains replaced or structurally refurbished	km	8
4R.16	Length of foul (only) public sewers	km	25200
4R.17	Length of surface water (only) public sewers	km	16986
4R.18	Length of combined public sewers	km	12277
4R.19	Length of rising mains	km	2392
4R.20	Length of other waste water network pipework	Km	172
4R.21	Total length of "legacy" public sewers as at 31 March	Km	57027
4R.22	Length of formerly private sewers and lateral drains (s105A sewers)	km	37000

Line	Item description	Unit	Current year
<b>B Sludge</b>			
4R.23	Total sewage sludge produced, treated by incumbents	ttds/ year	234.0
4R.24	Total sewage sludge produced, treated by 3rd party sludge service provider	ttds/ year	0.5
4R.25	Total sewage sludge produced	ttds/ year	234.4
4R.26	Percentage of sludge produced and treated at a site of STW and STC co-location	%	75.82%
4R.27	Total sewage sludge disposed by incumbents	ttds/ year	137.3
4R.28	Total sewage sludge disposed by 3rd party sludge service provider	ttds/ year	0.4
4R.29	Total sewage sludge disposed	ttds/ year	137.7
4R.30	Total measure of intersiting 'work' done by pipeline	ttds*km/ year	38
4R.31	Total measure of intersiting 'work' done by tanker	ttds*km/ year	1311
4R.32	Total measure of intersiting 'work' done by truck	ttds*km/ year	29
4R.33	Total measure of intersiting 'work' done (all forms of transportation)	ttds*km/ year	1378
4R.34	Total measure of intersiting 'work' done by tanker (by volume transported)	m3*km/ year	27032769
4R.35	Total measure of 'work' done in sludge disposal operations by pipeline	ttds*km/ year	0
4R.36	Total measure of 'work' done in sludge disposal operations by tanker	ttds*km/ year	21
4R.37	Total measure of 'work' done in sludge disposal operations by truck	ttds*km/ year	5997
4R.38	Total measure of 'work' done in sludge disposal operations (all forms of transportation)	ttds*km/ year	6018
4R.39	Total measure of 'work' done by tanker in sludge disposal operations (by volume transported)	ttds*km/ year	499879
4R.40	Chemical P sludge as percentage of sludge produced at STWs	%	47.21%

# 4S - Non-financial data - Sewage Treatment

Year ended 31 March 2018

Line description		Unit	Treatment categories								Phosphorus	
			Primary	Activated Sludge	Biological	A1	A2	B1	B2	Total		
A	Load received at sewage treatment works in 2017-18											
4S.1	Load received by STWs in size band 1	kg BOD <sub>5</sub> /day	3	152	927	122	14	827	22	2068	0	22
4S.2	Load received by STWs in size band 2	kg BOD <sub>5</sub> /day	0	15	451	17	0	1397	134	2013	0	18
4S.3	Load received by STWs in size band 3	kg BOD <sub>5</sub> /day	0	679	3013	370	142	5132	1898	11234	242	368
4S.4	Load received by STWs in size band 4	kg BOD <sub>5</sub> /day	0	3429	11354	419	4349	6003	12642	38196	137	3883
4S.5	Load received by STWs in size band 5	kg BOD <sub>5</sub> /day	0	8285	6387	1269	17903	696	15955	50494	0	4555
4S.6	Load received by STWs above size band 5	kg BOD <sub>5</sub> /day	0	40366	11782	2675	389398	2554	66048	512822	0	371623
4S.7	Total load received	kg BOD <sub>5</sub> /day	3	52926	33913	4872	411806	16609	96699	616828	379	380469
4S.8	Load received from trade effluent customers at treatment works	kg BOD <sub>5</sub> /day								76566		

<b>B Number of sewage treatment works at 31 March 2018</b>												
4S.9 STWs in size band 1	nr	5	30	292	18	1	122	2	470	0	2	
4S.10 STWs in size band 2	nr	0	1	22	1	0	64	6	94	0	1	
4S.11 STWs in size band 3	nr	0	10	50	6	2	92	27	187	4	4	
4S.12 STWs in size band 4	nr	0	14	42	2	16	24	40	138	1	15	
4S.13 STWs in size band 5	nr	0	9	7	1	19	1	17	54	0	5	
4S.14 STWs above size band 5	nr	0	6	4	1	32	1	23	67	0	22	
<b>4S.15 Total number of works</b>	<b>nr</b>	<b>5</b>	<b>70</b>	<b>417</b>	<b>29</b>	<b>70</b>	<b>304</b>	<b>115</b>	<b>1010</b>	<b>5</b>	<b>49</b>	

Line description	Unit	Current year
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<b>C Population equivalent</b>		
4S.16 Current population equivalent served by STWs	000	10229.898
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	104.460
4S.19 Current population equivalent served by activated sludge STWs with tightened/new P consents	000s	43.484
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	45.166
4S.24 Current population equivalent served by STWs with tightened/new UV consents	000s	0.000
4S.25 Population equivalent treatment capacity enhancement	000s	1.377

Treatment works consents														
Phosphorus			BOD <sub>5</sub>						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
14	2032	2068	0	54	238	984	791	2068	0	0	361	289	1419	2068
46	1950	2013	0	46	693	1209	65	2013	0	52	657	343	960	2013
793	9832	11234	0	759	4236	6200	39	11234	0	335	5492	1859	3547	11234
4680	29496	38196	0	5615	19037	13545	0	38196	0	3502	24923	4252	5520	38196
25973	19966	50494	0	6781	25001	18711	0	50494	0	8513	31623	4604	5754	50494
79286	61914	512822	0	111588	263007	138227	0	512822	0	273453	201113	33134	5122	512822
<b>110791</b>	<b>125190</b>	<b>616828</b>	<b>0</b>	<b>124844</b>	<b>312213</b>	<b>178876</b>	<b>895</b>	<b>616828</b>	<b>0</b>	<b>285855</b>	<b>264170</b>	<b>44482</b>	<b>22322</b>	<b>616828</b>
1	467	470	0	4	29	127	310	470	0	0	47	33	390	470
2	91	94	0	2	31	57	4	94	0	2	31	15	46	94
12	167	187	0	13	67	106	1	187	0	4	83	37	63	187
13	109	138	0	20	69	49	0	138	0	13	91	14	20	138
27	22	54	0	7	27	20	0	54	0	9	34	5	6	54
31	14	67	0	17	26	24	0	67	0	20	35	9	3	67
<b>86</b>	<b>870</b>	<b>1010</b>	<b>0</b>	<b>63</b>	<b>249</b>	<b>383</b>	<b>315</b>	<b>1010</b>	<b>0</b>	<b>48</b>	<b>321</b>	<b>113</b>	<b>528</b>	<b>1010</b>

# 4T - Non-financial data - Sludge Treatment

Year ended 31 March 2018

Line	Item description	by Incumbent	by 3rd party sludge service providers
		%	%
<b>A</b>	<b>Sludge treatment process</b>		
4T.1	% Sludge - untreated	0.0%	0.0%
4T.2	% Sludge treatment process - raw sludge liming	0.0%	0.1%
4T.3	% Sludge treatment process - conventional AD	92.9%	0.0%
4T.4	% Sludge treatment process- advanced AD	6.9%	0.1%
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%
<b>4T.9</b>	<b>% Sludge treatment process - Total</b>	<b>99.8%</b>	<b>0.2%</b>
<b>B</b>	<b>(Un-incinerated) sludge disposal route</b>		
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	99.8%	0.2%
4T.14	% Sludge disposal route - other (specify)	0.0%	0.0%
<b>4T.15</b>	<b>% Sludge disposal route - Total</b>	<b>99.8%</b>	<b>0.2%</b>

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

Year ended 31 March 2018

Line	Item description	Unit	Current year
<b>A</b>	<b>Properties and population</b>		
4U.1	Residential properties connected during the year	000	31.513
4U.2	Business properties connected during the year	000	1.736
4U.3	Residential properties billed unmeasured sewage	000	2112.833
4U.4	Residential properties billed measured sewage	000	1584.830
4U.5	Residential properties billed for sewage	000	3697.663
4U.6	Business properties billed unmeasured sewage	000	26.894
4U.7	Business properties billed measured sewage	000	146.878
4U.8	Business properties billed for sewage	000	173.772
4U.9	Void properties	000	259.378
<b>4U.10</b>	<b>Total number of properties</b>	<b>000s</b>	<b>4130.813</b>
4U.11	Resident population	000	8953.796
4U.12	Non-resident population	000	50.576
<b>B</b>	<b>Other</b>		
4U.13	Energy consumption - network plus	MWh	387068.263
4U.14	Energy consumption - sludge	MWh	88753.982
4U.15	Energy consumption - wholesale	MWh	475822.245
4U.16	Population resident in National Parks, SSSIs and Areas of Outstanding Natural Beauty (AONBs)	000s	133.308
4U.17	Total sewerage catchment area	km2	2241
4U.18	Designated bathing waters	nr	0
4U.19	Number of intermittent discharge sites with event duration monitoring	nr	770
4U.20	Number of monitors for flow monitoring at STWs	Nr	0
4U.21	Number of odour related complaints	nr	149
4U.22	Volume of storage provided at CSOs, storm tanks, etc to meet spill frequency objectives	m3	0
<b>4U.23</b>	<b>Total volume of network storage</b>	<b>m3</b>	<b>10700234</b>



# 4V - Operating costs analysis - water resources

Year ended 31 March 2018

Line	Item description	Unit	Impounding Reservoir	Pumped Storage	River Abstractions	Groundwater, excluding MAR water supply schemes	Artificial Recharge (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	0.0	0.0	0.2	4.0	0.0	0.0	4.2
4V.2	Income Treated as negative expenditure	£m	-0.3	0.0	0.0	0.0	0.0	0.0	-0.3
4V.3	Local authority and Cumulo rates	£m	1.5	0.1	0.4	0.1	0.0	0.0	2.1
4V.4	Other direct operating expenditure	£m	13.5	0.6	8.6	6.4	0.0	0.0	29.1
4V.5	Other indirect operating expenditure	£m	1.5	0.4	1.8	2.2	0.0	0.0	5.9
<b>4V.6</b>	<b>Total operating expenditure (excluding 3rd party)</b>	<b>£m</b>	<b>16.2</b>	<b>1.1</b>	<b>11.0</b>	<b>12.7</b>	<b>0.0</b>	<b>0.0</b>	<b>41.0</b>
4V.7	Depreciation	£m	5.9	0.5	1.4	0.5	0.0	0.0	8.3
<b>4V.8</b>	<b>Total operating costs (excluding 3rd party)</b>	<b>£m</b>	<b>22.1</b>	<b>1.6</b>	<b>12.4</b>	<b>13.2</b>	<b>0.0</b>	<b>0.0</b>	<b>49.3</b>

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.9	Employment costs - directly allocated	£m	7.4	2.6	27.4	67.3	104.7
4V.10	Employment costs - indirectly allocated	£m	4.2	2.9	7.8	13.2	28.1
4V.11	Number FTEs consistent with 4V.9 above	Nr	138.6	52.7	564.1	1166.1	1921.5
4V.12	Number FTEs consistent with 4V.10 above	Nr	56.7	38.8	105.0	177.3	377.8
4V.13	Costs associated with Traffic Management Act	£m	0.0	0.0	0.0	0.5	0.5

### C Service charges

4V.14	Canal & River Trust service charges and discharge consents	£m	0.0	0.0	0.0	0.0	0.0
4V.15	Environment Agency service charges/ discharge consents	£m	11.3	0.0	0.0	0.0	11.3
4V.16	Other service charges/permits	£m	0.0	0.0	0.0	0.0	0.0
4V.17	Statutory water softening	£m	0.0	0.0	0.0	0.0	0.0

# 4W Operating cost analysis - sludge treatment

Year ended 31 March 2018

Line	Item description	Unit	Untreated sludge	Raw sludge liming	Conventional AD	Advanced AD	Incineration of raw sludge	Incineration of digested Sludge	Photo- conditioning/ composting	Other	Total
Sludge treatment opex by treatment type											
A	Sludge treatment type										
4W.1	Power	£m	0.0	0.0	(8.2)	(2.5)	0.0	0.0	0.0	0.0	(10.7)
4W.2	Income treated as negative expenditure	£m	0.0	0.0	(14.9)	(1.8)	0.0	0.0	0.0	0.0	(16.7)
4W.3	Local authority and Cumulo rates	£m	0.0	0.0	4.1	0.9	0.0	0.0	0.0	0.0	5.0
4W.4	Other direct operating expenditure	£m	0.0	0.0	17.4	3.7	0.0	0.0	0.0	0.0	21.1
4W.5	Other indirect operating expenditure	£m	0.0	0.0	6.0	1.3	0.0	0.0	0.0	0.0	7.3
4W.6	Total operating expenditure (excluding 3rd party)	£m	0.0	0.0	4.4	1.6	0.0	0.0	0.0	0.0	6.0
4W.7	Depreciation	£m	0.0	0.0	33.6	3.9	0.0	0.0	0.0	0.0	37.5
4W.8	Total operating costs (excluding 3rd party)	£m	0.0	0.0	38.0	5.5	0.0	0.0	0.0	0.0	43.5
B	Sludge disposal route										
4W.9	Power	£m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4W.10	Income treated as negative expenditure	£m	0.0	0.0	(1.6)	(0.4)	0.0	0.0	0.0	0.0	(2.0)
4W.11	Local authority and Cumulo rates	£m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4W.12	Other direct operating expenditure	£m	0.0	0.0	9.7	2.1	0.0	0.0	0.0	0.0	11.8
4W.13	Other indirect operating expenditure	£m	0.0	0.0	1.0	0.2	0.0	0.0	0.0	0.0	1.2
4W.14	Total operating expenditure (excluding 3rd party)	£m	0.0	0.0	9.1	1.9	0.0	0.0	0.0	0.0	11.0
4W.15	Depreciation	£m	0.0	0.0	2.6	0.6	0.0	0.0	0.0	0.0	3.2
4W.16	Total operating costs (excluding 3rd party)	£m	0.0	0.0	11.7	2.5	0.0	0.0	0.0	0.0	14.2
Other expenditure - Wholesale waste water											
Line	Item description	Unit	Network plus sewage collection	Network plus sewage treatment	Sludge	Total					
C	Opex analysis										
4W.17	Employment costs - directly allocated	£m	17.7	43.2	20.2	81.1					
4W.18	Employment costs - indirectly allocated	£m	7.5	11.5	5.8	24.8					
4W.19	Number FTEs consistent with line 4W.17	Nr	354.1	863.5	409.4	1627.0					
4W.20	Number FTEs consistent with line 4W.18 above	Nr	110.2	168.8	85.6	364.6					
4W.21	Costs associated with Traffic Management Act	£m	0.1	0.0	0.0	0.1					
4W.22	Costs associated with Industrial Emissions Directive	£m	0.0	0.0	0.0	0.0					
D	Service charges										
4W.23	Canal & River Trust service charges and discharge consents	£m	0.9	1.1	0.0	2.0					
4W.24	Environment Agency service charges/discharge consents	£m	3.2	4.4	0.0	7.6					
4W.25	Other service charges/permits	£m	0.0	0.0	0.0	0.0					

# Supplementary disclosures

Year ended 31 March 2018

## Information in respect of transactions during the year with any other business or activity of the appointee or any associated company

### a) Borrowings and intercompany lending

	Amounts paid or received £m		Interest rates		Balance as at 31 March 2018 £m	
Severn Trent plc	Paid	265.000	LIBOR+	0.525%	Payable	9.300
Severn Trent plc	Received	267.800	LIBOR+	0.525%	Receivable	-
Hafren Dyfrdwy limited	Paid	26.090		3.635%	Payable	-
Hafren Dyfrdwy limited	Received	20.800		3.635%	Receivable	55.083
Water Plus Group limited	Paid	-	LIBOR+	1.600%	Receivable	99.841

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

Assets with a net book value of £10.3m were transferred from Severn Trent Green Power Limited to Severn Trent Water Limited during the year.

There were no guarantees were issued in favour of associated companies. There were no rights omitted to be exercised resulting in a reduction in the value of net assets of the company and no waivers of any consideration, remuneration, or any other payment receivable by the company.

### c) Supply of services

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

Service	Company	Turnover of associate in period £m	Terms of supply	Value £m
Wholesale charge	Water Plus Select Limited	961.699	Tariff	354.886
Transitional service arrangements	Water Plus Select Limited	961.699	Cost	1.238
Records Management	Severn Trent Data Portal Limited	1.013	Cost	0.467
Water supply and waste disposal	Severn Trent Services Defence Limited	49.828	Third Party	0.237
Sale of crops	Severn Trent Green Power Limited	12.694	Cost	0.702
Pass through of management charges	Severn Trent Plc	-	Cost	3.372
Pass through of management charges	Severn Trent Green Power Limited	12.694	Cost	0.349
Pass through of management charges	Severn Trent Wind Power Limited	2.379	Cost	0.057
Pass through of management charges	Severn Trent Services Operations UK Limited	37.929	Cost	0.665
Pass through of management charges	Midlands Land Portfolio Limited	-	Cost	0.412
Pass through of management charges	Etwall Land Limited	-	Cost	0.026
Pass through of management charges	Hafren Dyfrdwy Limited	27.922	Cost	1.405
				<b>363.816</b>

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

Service	Company	Turnover of associate in period £m	Terms of supply	Value £m
Supply of electricity	Severn Trent Green Power Limited	12.694	Market tested	4.986
Supply of electricity	Severn Trent Wind Power limited	2.379	Market tested	0.799
Pass through of management charges	Severn Trent Plc	-	Costs	1.294
				<b>7.079</b>

#### d) 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 (FY18 - 19%).

Company	Turnover of associate in period £m	Terms of supply	Value £m
Charles Haswell and Partners Limited	0.000	Cost	0.021
Midlands Land Portfolio Limited	0.000	Cost	0.005
Severn Trent Draycote Limited	0.000	Cost	8.838
Severn Trent Finance Holdings Limited	0.000	Cost	2.605
Severn Trent Green Power Limited	12.694	Cost	1.511
Severn Trent Investment Holdings Limited	0.000	Cost	2.435
Severn Trent Plc	0.000	Cost	0.046
Severn Trent Retail and Utility Services Limited	0.000	Cost	0.007
Severn Trent Services Purification Limited	0.000	Cost	0.005
Severn Trent Services International (Overseas Holdings) Limited	0.000	Cost	-0.356
Severn Trent Services Operations UK Limited	37.929	Cost	-0.018
Severn Trent Services (Water and Sewerage) Limited	0.601	Cost	0.017
Severn Trent Systems Limited	0.000	Cost	0.014
Severn Trent Utility Services Limited	0.000	Cost	0.004
Severn Trent Wind Power Limited	2.379	Cost	0.032
Severn Trent (W&S) Limited	0.000	Cost	4.759
Water Plus Select Limited	961.699	Cost	0.133
			<b>20.058</b>

Charges for consortium relief tax losses of £0.480m was claimed from Water Plus Select Limited in the year, which changed from a subsidiary undertaking to a joint venture during the year.

