

United Utilities 2017/18 Annual Performance Report



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Introduction

A provider of a vital public service

United Utilities Water Limited (Uuw) provides water and wastewater services to seven million customers in the North West of England and represents the principal activity of the United Utilities Group. Uuw is regulated by Ofwat, the economic regulator of the water sector in England and Wales.

5 year price reviews

One of the key aspects of the regulatory framework is the price review process, which determines required service levels and expected company revenues for five-year asset management planning (AMP) periods.

The last price review (PR14) set the assumed price, investment and service package that customers should receive for the current period, April 2015 to March 2020 period (AMP6). It also defined the incentive regimes which reward or penalise companies depending upon how their actual performance and expenditure compares to the assumed performance and expenditure levels.

The Annual Performance Report

The Annual Performance Report is designed to provide customers and other stakeholders with a detailed and transparent commentary on our performance in 2017/18 and to set out how this performance compares to the expectations set in the last price review.

The 2019 Price review (PR19)

We will publish our proposed business plan for the next five year period, April 2020 to March 2025 (AMP7) in September 2018. Ofwat will scrutinise these proposals and is expected to determine the price, investment and service package that customers should receive for this period at the end of 2019.

Impact of current performance on PR19

The PR19 process takes account of the impact of actual and predicted performance during the current period.

We have therefore provided **additional detail within this year's APR on the actual and anticipated performance for the full 2015 – 2020 period** and summarised how this performance would be expected to impact bills in the 2020 – 2025 period.

We have also **published a more detailed document setting out the detail of how the AMP6 performance flows through the AMP6 incentive mechanisms** to generate the impacts summarised in this document. This document and a suite of additional early PR19 publications are available on our website via the following [link](#)



Transparent reporting

This Annual Performance Report (APR) is one of a number of publications on our website that together are designed to ensure that the reporting of the performance of Uuw and the United Utilities Group is reliable, accurate and transparent.

The key report from a corporate and financial perspective is the **United Utilities Group PLC Annual Report and Financial Statements**.

This report is now published as an interactive web page on a dedicated micro site within the UU website.



This website, pictured above and available via this [link](#), is designed to provide detailed information on the financial performance and position and governance of the group and is mainly targeted at equity and debt investors.

To complement this report, the United Utilities Water Limited Annual Report and Financial Statements provides detailed information on the financial performance and position of U UW and forms the basis of the Regulatory Accounts, which are set out within this document.

Other key performance information is published on our [corporate responsibility website](#), pictured below, which is used to communicate relevant information more regularly than would be the case through a traditional annual report.

The website is designed to describe the way that the group has operated and demonstrate the extent to which we have upheld the highest standards of performance with respect to the way we work with employees, customers and our impact on the environment.

This website contains substantial additional guidance and supporting information for customers, including information on how they can contact us or our regulators in relation to a wide range of issues.

The Annual Performance Report is part of this suite of publications and other information on our websites designed to provide a transparent and representative view of our performance in the year.



Feedback and lessons learnt

Transparency and confidence in our reporting

It is important that we provide information to customers and stakeholders that enables them to understand how we are performing and to have confidence that we have processes in place to ensure that this information can be trusted.

Independent assessment of our reporting

As part of Ofwat's approach to monitoring and assuring delivery it expects companies to have processes in place to ensure that the information they publish can be trusted.

Ofwat uses the "company monitoring framework" – a series of assessments of the quality of each company's information – to perform an annual assessment of the quality of each company's information.

In [Ofwat's most recent \(2016/17\) assessment](#) U UW was one of only two companies to retain the highest rating "self-assurance" and one of only three companies to be placed in this category. This means that because there is a greater degree of confidence in the quality of our reporting, U UW is allowed more discretion in the assurance that we put in place and in the way that we consult with stakeholders on our plans and assurance.

Feedback and continual improvement

Although we were pleased to have retained Ofwat's self-assurance categorisation, we have continued to actively seek feedback to continue to improve the content and transparency of our 2017/18 reporting.

To support this objective, during the year we published and consulted on a "Risks, strengths and weaknesses and draft assurance report" and then following feedback published our "Final Assurance Plan" for our 2017/18 reporting. These publications are available on our [website](#).

YourVoice

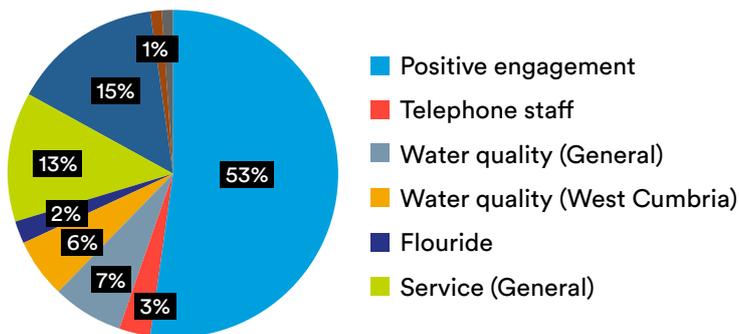
The YourVoice panel has played an integral role in monitoring, challenging and reporting on the delivery of the company's 2015-2020 business plan commitments.

As an independent body of individuals from different sectors and backgrounds and with a variety of different areas of expertise, YourVoice looks at how the company can continue to capture and strengthen the views of its customers in its activities. You can read more about the work of the panel [here](#).

To complement this work, we also ran a targeted social media campaign for two weeks in October 2017. We promoted a range of information about our last Annual Performance Report and used advertising to gain substantial additional exposure across the region.

One set of posts was targeted to drive traffic towards detailed information about current performance levels which achieved 10,000 page views. 6,000 of these were to the annual performance webpage and the rest across blogs used to raise awareness on specific points such as water efficiency. Typically we had been receiving just over 100 page views over an equivalent period so this was a marked improvement.

Feedback topics on social media campaign October 2017



Our posts were designed to encourage two way dialogue with customers and generated exchanges on a variety of topics. The chart shows a breakdown of the 380 conversations.

A range of publications

We have sought to continually improve the coverage and presentation of our reporting by taking on board the feedback we receive so as to increase the engagement with our reporting.

During 2017/18, we continued to report performance to YourVoice on a quarterly basis to allow the panel to evaluate how we are performing in delivering our commitments to customers.

We have also sought the panel’s views on how we should communicate this performance to customers, with this feedback helping to shape the suite of documents and supporting information that we publish on our website.

This report, the “Annual Performance Report” (APR), is designed to provide a detailed review of performance in the year. It is one of six key regulatory reporting documents published on our website, as set out in the table below:

In addition to this document, we also provide a digital presentation of our reporting and have provided an enhanced landing page and website. This offers more direct content and an animation which helps to explain the key points and messages from the APR.

We also publish a shorter customer-focused version of the report which achieves the Crystal Mark for plain English. This is [“Our performance 2017-18: a summary guide”](#) and provides a succinct and more accessible summary of our performance - good and bad – and our progress in delivering against our promises.

We have also published a number of more detailed technical documents on the website, to provide greater detail and transparency to some of the information, terminology and assumptions used within the main reports.

Delivering our promises a summary guide	<ul style="list-style-type: none"> • An overview of our annual performance in line with the five customer promises that underpin our business plan for the AMP6 period.
Annual Performance Report	<ul style="list-style-type: none"> • A comprehensive, detailed and assured account of our performance.
Cost assessment data	<ul style="list-style-type: none"> • Detailed cost and cost driver data and supporting commentary, used to develop cross company cost comparisons and cost prediction models.
Outcome definition document	<ul style="list-style-type: none"> • Detailed technical information on the nature, calculations and assumptions underpinning each of our outcomes and performance commitments.
Accounting methodology statement	<ul style="list-style-type: none"> • Methodology and commentary on significant movements in our upstream totex reporting.
YourVoice customer panel-reflections	<ul style="list-style-type: none"> • Independent reflections and feedback on UUW's performance during 2017/18.

Coverage of this report

We have retained the same overall structure for this report that we used in 2016/17.

We have enhanced this year's report by adding:

- A UUW Board overview of our performance and the company's actions during the year.
- Additional information on financial performance and financial flows.
- Additional commentary to provide a view of performance over the full five year period (2015 – 2020) in addition to the detail on actual performance in 2017/18.

The key sections within the APR are summarised below:

Our 2017/18 Annual Performance Report contains the following sections:

Introduction	<ul style="list-style-type: none"> • Puts the document in context and helps the reader to navigate within the document.
Executive summary and overview	<ul style="list-style-type: none"> • Sets out the key elements and conclusions of the report.
Risk and Compliance Statement	<ul style="list-style-type: none"> • Sets out the key elements and conclusions of the report including Board statement.
Annual performance	<ul style="list-style-type: none"> • Detailed commentary on our performance in 2017/18 and summary of anticipated performance for the remainder of AMP6.
Regulatory Accounts	<ul style="list-style-type: none"> • Detailed regulatory accounting data and disclosures, including copies of Ofwat's pro forma data tables.
Appendix 1 Assurance summary and findings	<ul style="list-style-type: none"> • A summary of the assurance undertaken to support this report, including the findings from this assurance.
Appendix 2 Outcome delivery calculations	<ul style="list-style-type: none"> • Providing the detailed calculations that support the index based performance commitments.



Executive Summary and Overview

2017/18 UUW Board statement

Preparing for the long term

United Utilities Water Limited's Board of directors and its executive team are committed to achieving the very best results for the company, the customers it serves and its wider stakeholders.

The Board of directors develops and approves policies and strategies that promote the long-term success of the company. The executive directors are responsible for managing the business and implementing those policies and strategies. The non-executive directors constructively challenge the executive directors and monitor the delivery of the strategy within the risk and control framework set by the board.

Our purpose is to provide great services to our customers and communities in the North West, creating long-term value for all of our stakeholders. Our vision is to be the best UK water and wastewater company and our core values of acting with integrity and focusing on customers provides both the framework for our business culture and the way in which employees go about their daily work. Our purpose, vision and strategy are described in more detail on our website <http://unitedutilities.annualreport2018.com/strategic-report/our-purpose-and-strategy>.

The governance and leadership of UUW mirrors that of the holding company, United Utilities Group plc. More information on the role of the Board of directors, how strategy is set and our approach to promoting the long-term success of the company and customers' interests can be found in our Group Annual Report and Financial Statements ARFS <http://unitedutilities.annualreport2018.com/> an integrated report prepared and presented in accordance with the International Integrated Reporting Council's framework.

Setting targets and delivering obligations

Performance targets for 2015-20 were developed by speaking to thousands of customers and wider stakeholders across the North West of England to understand what they consider to be important about the services we provide and the levels of service they want. This engagement resulted in nine outcomes, each underpinned by specific 'measures of success' to allow our performance to be judged. In addition to delivering against these targets, the company must comply with a range of statutory obligations – including under the Water Industry Act 1991 – and broader duties to customers, the environment and other stakeholders. Further details of how we identify these requirements and manage the risks of compliance with them are set out in the Risk and Compliance Statement, within our Annual Performance Report.

To address the challenges customers tell us are important, we are implementing a Systems Thinking approach, designed to optimise how we use data, the way we manage our assets and how our people work on a day to day basis. It is ensuring that we can address asset and network problems before they affect customers and respond to incidents more quickly and effectively when they do occur.

Monitoring delivery of the strategy

The water industry is influenced and affected by a wide range of issues, from the health of the environment and the economy to long-term resilience needs to cope with a changing climate and growing population. Actively seeking to understand these external factors ensures we respond effectively to these drivers for change.

Views about our performance from different segments of customers are acted upon. Continuous feedback is obtained through weekly customer service research, through daily feedback from those impacted by our activities, by asking customers to rate our performance and from bespoke pieces of research.

We regularly ask customers how they think we are performing against our five year business plan and what they value most from the services we provide so that we can get their views on what areas we need to focus on in the future.

More information on our approach to, and engagement with, customers and wider stakeholders can be found in the Group Annual Report and Financial Statements.

<http://unitedutilities.annualreport2018.com/strategic-report/stakeholder-engagement/our-stakeholder-engagement>

Performance against our targets is reviewed at each scheduled board meeting. Where there is any risk to delivery of targets, these are highlighted and any proposed action plans reviewed.

Risk reports are developed through an approach that aligns with the UK Corporate Governance Code and are reviewed at full and half year statutory accounting periods. During the year, we continued to enhance our risk management approach by increasing the formalisation and governance of our risk appetite framework. As part of this we now utilise a wholesale risk and resilience board and core risk team meetings with improved sign-off processes for all risks and a focus on long-term resilience. More information on risk management can be found in the Group Annual Report and Financial Statements. <http://unitedutilities.annualreport2018.com/strategic-report/how-we-manage-risks>.

Understanding and responding to change

We use the information from these monitoring processes to improve the service that we offer to customers. Priorities for service improvement and investment plans are considered through the annual company business planning and budget setting processes.

We are pleased that the implementation of Systems Thinking is delivering sustainable improvements in service, resilience and efficiency and is contributing to our performance in the current regulatory period. In late February and early March 2018 the North West experienced a “freeze-thaw” event where severe cold weather was followed by a rapid warming. This presented a significant risk of disruption to customers through pipe bursts and loss of supply. We had to commit significant resources to planning for and mitigating the consequence of this event but overall this was successful in preventing serious disruption affecting customers. Together with the rest of the industry, we are now considering what lessons can be learned from this experience and applied to future service risks.

Customer service measures – including Ofwat’s Service Incentive Measures – continue to show ongoing improvement and we have put in place what we consider to be an industry leading package of Priority Services for vulnerable customers and those in financial need.

Our wastewater Outcome Delivery Incentive (ODI) performance remains strong, but we recognise that against our water measures there are still areas in which we can improve and we are committed to achieving this. In particular, our water metrics over the first three years of this regulatory period have been impacted by a number of big bursts on our network. We have sought to minimise the impact of these events on customers and we are working hard to improve performance in this area by, for example, increasing investment in alternative supply vehicles which pump water into the system on a short term basis whilst repairs are ongoing. In the absence of any unforeseen events over the remainder of 2015-2020, we expect to end the period with a cumulative net reward on ODIs.

In July 2017, we were delighted to retain Industry Leading Company status, as measured through the Environment Agency’s Environmental Performance Report. We achieved frontier performance for the sector with the lowest number of pollution incidents, alongside our best in sector level of self-reporting. We also retained our World Class rating in the Dow Jones Sustainability Index for the tenth consecutive year.

United Utilities Water Limited has a robust capital structure with credit ratings of A3 and A- from Moody’s and Standard & Poor’s respectively.

We are delivering a low cost of debt which helps set industry benchmarks for efficient financing costs. The efficient delivery of our investment plan and our approach to innovation and Systems Thinking also gives us confidence in delivering total out performance of £100 million against our AMP6 allowance, on a like for like basis.

We are sharing our anticipated net out performance by reinvesting to improve resilience for the benefit of customers. We have increased the additional investment that we are making available in this regulatory period from £100 million to £250 million. This is in line with the approach we took in the 2010-15 regulatory period.

UUW’s dividend policy for the 2015-20 regulatory period is to distribute:

- A base return of 5% on the equity portion of the Regulatory Capital Value;
- Non-appointed business profit; and
- An amount no greater than cumulative out performance delivered compared to the assumptions made by Ofwat in the determination for the relevant period.

The Board reviews the appropriateness of its dividend policy annually and believe this represents an appropriate policy taking into consideration:

- The challenges of the 2015-2020 final determination;
- The aim to invest an extra £250 million into resilience programmes for the benefit of customers;
- The importance of income to shareholders; and
- The need to retain a robust and sustainable capital structure.

Appropriate linkage between performance and reward

Our remuneration policy is aligned to our purpose, vision and strategy thereby incentivising great customer service and the creation of long-term value for all of our stakeholders. A detailed statement of directors' remuneration and standards of performance is set out within our Regulatory Accounts, Section 2 of our Annual Performance Report.

All directors of United Utilities Water Limited are also directors of United Utilities Group PLC and further details of their remuneration and how their performance measures are linked to our business strategy can be found in our Group Annual Report and Financial Statements.

<http://unitedutilities.annualreport2018.com/governance/corporate-governance-report/annual-statement-from-the-remuneration-committee-chair>

Non-executive directors

As outlined in the Annual Performance Report, the Chairman and non-executive directors do not participate in the company's incentive arrangements (i.e. annual bonus or share schemes) and were paid no remuneration other than their respective directors' fees.

Executive directors

Through the annual bonus and long term plan (LTP), executive directors receive remuneration linked to the achievement of performance measures.

The 2017/18 bonus was based upon four main components:

- Underlying operating profit;
- Customer service in the year (measured through the Service Incentive Mechanism);
- Maintaining and enhancing services for customers (measured through a wholesale outcome delivery incentive composite and through a time, cost and quality index assessment of the delivery of the capital programme); and
- Personal objectives.

The LTP outcomes are measured over a three-year period. LTP awards with a performance period ending 31 March 2018, and for those granted up to and including 31 March 2020, are based on three performance measures:

- Relative total shareholder return;
- Sustainable dividends; and
- Customer service excellence.

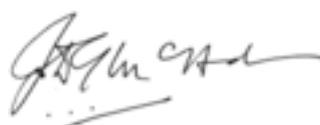
In determining the outcome of the incentive schemes, standards of performance are assessed by the United Utilities Remuneration Committee to ascertain whether targets have been achieved. In addition, the Committee also considers relevant reports from Ofwat in assessing the achievement of standards of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

The work we do delivers a wide range of benefits to a variety of stakeholder groups, creating long-term sustainable value for customers, shareholders, people, the environment and communities in our region. Being a responsible business is at the heart of our approach.

Signed on behalf of the Board



Steve Mogford
Chief Executive Officer



Dr John McAdam
Chairman

This statement was approved at a meeting of the United Utilities Water Limited board on 25 June 2018 and signed off on its behalf by Dr John McAdam, Chairman and Steve Mogford, Chief Executive Officer.

Executive summary & overview

Introduction

Defining our targets and commitments for the 2015-2020 (AMP6) period

Every five years we work with customers and stakeholders to develop a five year business plan. Our business plan for 2015-20 (AMP6) was finalised through the 2014 price review process (PR14), with Ofwat publishing the Final Determination (FD) on its website [link](#).

The determination sets expectations about: customer service and performance standards; the levels of investment that the company is expected to make; and the revenue that the company will need to recover from customers to finance this expenditure. It also sets out incentive and change control mechanisms to manage variances from these assumptions.

Reporting our performance against AMP6 targets and commitments

This is our third Annual Performance Report (APR) for the 2015-20 period and covers the period from April 2017 to March 2018.

The report sets out our progress so far against our plans and targets for the AMP6 period. It highlights where we have outperformed these expectations and also describes where we have failed to meet the targets. Where we have not met our targets we have set out the actions that we are planning to take to improve performance.

This report is one of a number of documents on our website which are designed to provide clear and transparent reporting on the performance of U UW as well as United Utilities Group PLC (UUG).

Comparing our performance against our peers

As companies generally developed their performance measures independently, similar sounding measures can have different definitions. To provide clarity on the definitions we have used, we have published detailed definitions, explanations and supporting information for our performance commitments on the [UU website](#).

To allow a more meaningful comparison to be made, we have worked with regulators and the rest of the water industry to develop a suite of comparative information and performance measures. These measures are still subject to different interpretations between companies, but do provide a view of relative performance. This information is available on the [Discoverwater website](#).

Ofwat has reviewed the information published in last year's APRs and as part of its financial monitoring framework published the report "Monitoring financial resilience report 2016-17". The report provides information on the relative performance and financial strength of the water and wastewater companies that Ofwat regulates. This report is available on the [Ofwat website](#).

The remainder of this executive summary and overview provides further detail on:

- **Our customer service and operational performance** against the outcomes and performance commitments set out within our PR14 business plan and the FD.
- Our expenditure, revenues and financial metrics, relative to the assumptions made in the FD, for the individual price controls and for U UW overall.
- **Our anticipated performance against the five year incentive mechanisms**, to support the PR19 process.

Our customer service and operational performance

Introduction

As part of the planning that we undertook for the 2015-20 period, we spoke to thousands of people across the North West to understand what levels of service they wanted from us. This work resulted in five customer promises, based on the things that customers and stakeholders told us were most important about the services that we provide.

Each of these promises has a number of ‘outcomes’, which represent what we’re aiming to achieve. Each outcome is underpinned by specific ‘measures of success’ that allow customers and stakeholders to judge our performance.

At the 2014 Price Review, we set annual performance commitments based on customer willingness to pay for service or on the cost of service failure. Ofwat challenged some of the performance commitments associated with industry-wide measures to bring them in line with its estimate of upper quartile industry performance. Many of the performance commitments are challenging, and require a significant improvement on our 2010-15 levels of performance.

The majority of performance commitments carry a financial penalty if we under perform and for some of these we can also earn financial out performance payments if we out perform. There is a limit or ‘cap’ to the amount we can be rewarded for any measure in any given year. Similarly, there is a limit (known as a ‘collar’) to the amount we can be penalised for under performing.

However, we don’t always enter penalty or reward territory immediately. For some measures, we have to out perform (or under perform) beyond a certain level before there is a financial impact. This is to ensure that out performance payments and penalties are applied where there is significant deviation from a target and not where the under or out performance is attributable to natural or random variations only.

In a year beset by heavy rainfall, for example, it might be difficult to meet our sewer flooding commitment. That’s why there’s a margin or buffer built into this measure (known as the ‘deadband’), which means we do not immediately incur a penalty as soon as we fall below target. Similarly, for some measures we don’t enter instant out performance payments as soon as we out perform a target. We have to get beyond the reward ‘deadband’ to start earning an out performance payment – to guarantee our great performance is the result of our own efforts and not the result of external factors, such as a mild winter, for example.

Diagram showing how our incentives work



In this diagram, the measure would be in out performance payments for two years, in penalty for two years and in the deadband for the final year. Any net penalty or out performance payments over the five years is included as part of the PR19 process for setting customer bills for the 2020-25 period.

Overview of performance in the year

Our plans for 2015-2020 are challenging and targets get tougher as we move through the period. Performance over the first two years of the period produced an overall out performance payment of £9.2 million. This year although we have maintained or improved performance in twenty one out of twenty seven measures, the out performance payments we earned are smaller than the penalties we received and we incurred a net penalty of £7.0 million.

We explained in previous reports that our targets were challenging and would require significant improvements in some areas. To help to manage these challenges we accelerated our five-year investment programme to deliver operational improvements as early as possible. We have also rolled out additional information technology to improve the way we apply our “Systems Thinking” approach to using our assets, our data and how our people work on a day to day basis.

This is contributing to out performance in the current regulatory period which we are sharing with customers in the form of £250 million of additional investment in resilience projects.

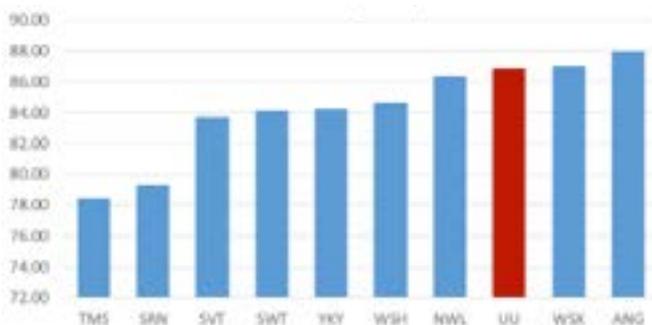
Our main areas of out performance payments this year have come through our good performance in wastewater including the way we manage the previously private sewer network, which recently transferred to UUW, and in minimising pollution incidents. In 2016/17 one of the main areas we saw penalties was sewer flooding. This year performance has improved sufficiently for us to beat our tougher target, although not sufficiently to earn an out performance payment.

In water although we continue to beat our leakage target, we have seen disappointing performance and penalties for a second year associated with interruptions to water supply (part of the Reliable Water Index) and water discolouration (part of the Water Quality Service Index).

We are also pleased that our environmental performance is reflected in our ‘Industry Leading Company’ status as measured through the Environment Agency’s annual assessment.

A number of our ODI measures are, however, susceptible to one-off events and, on the whole, our ODI targets get tougher each year. Therefore, we would expect that even if our performance levels remain relatively high, we are likely to incur some additional penalties in the later years of the five year period.

2017/18 SIM score for water and sewerage companies



At the start of the period we thought that this would lead to us earning a net penalty over the five years. The improvements and plans we have put in place to improve performance are starting to take effect and our current view of the potential range of the cumulative net ODI incentive over the period ranges from zero to plus £30 million.

Our target for customer service as measured through the Service Incentive Mechanism (SIM) is to move to the upper quartile of the ten water and sewerage companies.

We are particularly pleased with our continued progress this year, which saw our overall SIM score increasing by a further two points from 85 to 87 and ending the year as an upper quartile company in our peer group.

2017/18 performance

Performance against our Outcomes during the first three years of the AMP6 period is set out below. Fuller details are set out in Section 1.1 Outcome delivery.

Operational Performance Summary (2017/18)

Performance commitment	Actual Performance		Commitment		2017/18 Incentives	
	2016/17	2017/18	2017/18	Pass / Fail	Impact	Value
Providing you with great water						
Drinking Water Safety Plan risk score	4.3	4.3	<= 4.3	Pass	Reputational	
Water quality events DWI category 3 or above	22	27	<= 10	Fail	Penalty	(£0.745m)
Water Quality Service Index	116.923	98.645	>= 145.900	Fail	Penalty	(£3.619m)
Average minutes supply lost per property (a year)	13:33	13:09	<= 12:00	Fail	Penalty	(£5.962m)
Reliable water service index	77.840	70.827	>= 100	Fail	Penalty	(£7.974m)
Security of supply index (SoSI)	100.00	100.00	= 100.00	Pass	At target	
Total leakage at or below target	23.4	9.1	>= 0	Pass	Deadband	
Resilience of impounding reservoirs	164.25	165.42	>= 164.44	Pass	No reward	
Thirlmere transfer into West Cumbria (see note 1)	5	25	>= 21	On track	At target	
Disposing of your wastewater						
Private sewers service index	91.92	85.00	<= 100	Pass	Reward	£7.376m
Wastewater network performance index	89.47	86.17	<= 99.4	Pass	At target	
Future flood risk (number of properties)	16,418	16,395	<= 16,341	Fail	Reputational	
Sewer flooding index	94.4	69.99	<= 73.9	Pass	Deadband	
Giving you value for money						
Number of free water meters installed	32,447	36,615	>= 57,393	Fail	Reputational	
Customers saying that we offer value for money	52	52	>= 51	Pass	Reputational	
Per household consumption (litres/household/day)	304.6	310.5	<= 289	Fail	Reputational	
Delivering customer service you can rely on						
Service incentive mechanism (SIM) (see note 2)	85.44	86.87	UQWASC	TBC	TBC	TBC
Customer Experience Programme £m (see note 1)	0.363	2.576	>= 6.396	On track	Deadband	
Delivering our commitments to developers	98%	94%	>= 93%	Pass	Reputational	
Protecting and enhancing the environment						
Contribution to rivers improved – water (Km)	82.6	80.6	>= 6.6	Pass	Reward	£0.185m
Contribution to bathing waters improved	0.66	1.49	>= 1.49	Pass	No reward	
Protecting rivers from deterioration due to growth	48.0	210.5	>= 190.1	Pass	No reward	
Maintaining our wastewater treatment works	58.71	30.47	<= 83	Pass	No reward	
Contribution to rivers improved wastewater (Km)	46.98	120.73	>= 121.83	On track	Reward	£0.4278m
Wastewater (category 1 & 2) pollution incidents	2	0	<= 3	Pass	No reward	
Wastewater category 3 pollution incidents	150	129.00	<= 198	Pass	Reward	£3.278m
Satisfactory sludge disposal (%)	100.00	100.00	<= 100	Pass	At target	
Totals						
Total net penalty position (see note 3)						£7.033

¹ The penalty or out performance payment for these measures is based upon the performance at the end of the five year period only. The annual performance assesses whether we are on track to achieve this target.

² Upper quartile for water and sewerage companies.

³ Although a total incentive position is provided in the table, actual penalties or out performance payments are determined individually for each price control.

Providing you with great water

Outcomes:

- a) Your drinking water is safe and clean and
- b) You have a reliable supply of water now and in the future

Performance:

Five out of nine measures achieved
Net penalty of £18.3m (water)

What do customers want?

Customers told us that they were happy with the quality of their water but, in some instances, would like its taste, smell and appearance to be improved. Customers also expect reliable, uninterrupted water supplies, and to have enough water in the North West to keep the taps flowing for many years to come, even in the face of long-term issues such as climate change.

How have we done?

Our performance against water quality and availability measures has met or exceeded our targets for five out of nine measures.

We have beaten our leakage target again this year, despite the severe weather experienced in February and March and have maintained our 100% performance level against our longer term security of supply target.

Good progress has been made on our major project to construct a pipeline which will allow us to transfer water from Thirlmere reservoir into West Cumbria. We are aiming to be able to deliver this project as soon as possible and are planning for it to be significantly ahead of the planned delivery in 2021/22 although this is still heavily dependent on the weather and potential construction difficulties. More details of our work in West Cumbria can be found on [our website](#).

We also continue to provide a very high level of water quality. Despite this, we failed to meet four of our increasingly tough targets this year.

Performance against our combined water quality measure was mainly impacted by an increase in the number of complaints about discoloured water. We are seeking to improve performance in this area through an extensive and ongoing mains cleaning programme that will reduce the risk of customers receiving discoloured water.

Mean zonal compliance, which measures performance against 39 water quality standards, also contributes to this index. Although our performance improved to 99.97% our performance commitment increased to 100%. Meeting such a target is challenging, not least due to the influence of customers' own internal plumbing on several water quality parameters.

The number of water quality events that we report to the Drinking Water Inspectorate has also increased slightly in the year. We have been working closely with the DWI to learn lessons from the incidents we have experienced and are implementing a transformation plan delivering improvements at water treatment works and in the network to meet our increasingly challenging water quality targets.

Our failure to meet two performance commitments associated with water supply interruptions was largely due to a major burst in the Lytham area in July 2017 that affected nearly 3,000 properties for more than 12 hours. To help us manage potential future bursts, we have expanded our alternative supply "water on wheels" fleet which allows us to get customers' water supply restored through tankered water whilst we are repairing damaged mains.

We are continuing to focus investment on poor condition mains that supply a large number of customers and on managing pressure in key mains to reduce the risk of bursts.

Disposing of your wastewater

Outcomes:

- a) Your wastewater is removed and treated without you ever noticing, and
- b) The risk of flooding for homes and businesses is reduced

Performance:

Three out of four measures achieved
Net out performance payments of £7.4m (wastewater)

What do customers want?

Customers told us they want a reliable wastewater service that works well behind the scenes, and reduced sewer flooding, provided in a cost effective way that does not adversely affect bills.

How have we done?

The overall performance of the sewer network - in terms of the numbers of blockages, collapses and equipment failures has been improving over recent years, with a further year on year improvement in the sewer network index score in 2017/18. Our recent investments in improved resilience and the use of our Integrated Control Centre have allowed us to continue to improve the effectiveness of our investment in the network and to be able to respond more effectively to incidents when they do occur.

Our primary focus in this area relates to sewer flooding. Flooding is directly impacted by a number of factors, some of which are outside of direct management control, most notably rainfall. In our business plan we proposed an ambitious target of reducing sewer flooding to customers' homes by 40%. As part of the price review process Ofwat made this target even more challenging by setting industry-wide upper quartile targets which become increasingly tough throughout the period.

We recognise that this is a priority area for customers and have been targeting schemes that are designed to reduce the risk of flooding of customers' homes and in areas that are more likely to experience flooding. We have also been undertaking an extensive sewer cleaning programme along with a comprehensive drainage area programme to help us continue to improve our performance.

As a result of the work we have undertaken and the fact that the weather in the year was relatively calm, we beat our sewer flooding target in 2017/18, although not by enough to earn financial out performance payments.

The target continues to tighten in future years. This will present a greater level of challenge, given the nature of our sewerage system and the level of rainfall in the North West. We will therefore continue to review our operational and investment decisions on a regular basis to help reach the optimal position against this measure.

In 2011 a large number of previously privately owned sewers transferred to U UW ownership for the first time. We measure performance on these assets separately. We believe that we manage this network in a more proactive way than some other water companies. This approach means that we do spend more than if we managed these assets in a purely reactive way, but it has the benefit of a better level of performance. As a result of this approach and the acceleration of investment in this area, we have again out performed our performance commitment target and earned out performance payments.

Giving you value for money

Outcomes:

a) Bills for you and future customers are fair

Performance:

One out of three measures achieved
All reputational

What do customers want?

Customers want bills that are fair and affordable, with support for those who struggle to pay and money spent on projects that will deliver real improvements to services and the region as a whole. Our priority should be our core water and wastewater services, but we should maximise opportunity for partnership working to bring about environmental enhancements.

How have we done?

This year we have achieved our target for customers saying we offer value for money, but there is still more we can do. We recognise that perceptions of 'value' are driven by greater understanding of the work we do, so we continue to take opportunities to talk about how to save money and to promote our wider services to customers.

We continue to be committed to helping those customers who are struggling to pay, to help them to get back on track. In January, we hosted the first ever North West Affordability summit, engaging with many of our customers and other stakeholders and building on our already leading position on affordability and vulnerability.

This work underpins our Priority Services, which provides targeted support and tailored assistance for customers experiencing short or long-term personal or financial difficulties in their lives. Over 52,000 customers registered for this service.

We have not reached our targeted reduction in the amount of water each household uses. We have continued to promote water efficiency and water meters to customers throughout the year, however, the amount of water each household uses has increased compared with last year.

We have delivered a significant programme of water efficiency including competitions, summer events, press/radio/bus advertising, home visits, roadshows and digital campaigns and have given out over 70,000 water efficiency devices that were ordered online. Online activity by customers can be seen to increase following such campaigns.

Further water efficiency initiatives are ongoing and planned, particularly our project using water data to influence customer behaviour to save water and money. The factors that influence how much water customers use are wide ranging and highly complex, and this measure is difficult to control. Although a number of additional initiatives and trials are being considered there is a risk we won't meet our targets for the next two years.

We are aware that we cannot deliver environmental and social challenges on our own. By supporting partners with similar aims as ourselves, we are able to work together and, in most cases, attract further funding from other sources – helping our customers' money go even further.

Partnerships are offering a great way of connecting communities with issues. Our [Love My Beach](#) partnership, with Keep Britain Tidy and the Environment Agency, has continued to grow with nearly 600 volunteers – including over 200 of our own employees – dedicating over 8,800 hours to cleaning beaches, removing 6,500 bags of litter from beaches and estuaries.

Delivering customer service you can rely on

Outcomes:

a) You're highly satisfied with our service and find it easy to do business with us

Performance:

One out of two reputational measures achieved. Performance on SIM is positive but the position is dependent upon other companies' performance.

What do customers want?

Customers want great service from us every time they get in touch – with easy access to our services and information, for problems to be resolved quickly and professionally, and great communication about those issues we can't solve straight away.

How have we done?

Customer service sits at the core of everything we do. We have met two of our three measures and are waiting for Ofwat's confirmation whether we have met the third measure. Our strong focus on customer service has driven substantial improvements in recent years, becoming the most improved company for performance against Ofwat's Service Incentive Mechanism (SIM) in the 2010-15 period with a reduction of around 75% in the overall number of customer complaints.

We have delivered further improvements in customer satisfaction over the year and a step change in performance since the start of AMP6. This is reflected in our Service Incentive Mechanism (SIM) performance for which we have achieved our best ever score this year against Ofwat's qualitative SIM measure. Our target for SIM is to be in the top quarter of the water and sewerage companies in the England and Wales water-industry performance tables.

As this assessment is relative to other companies, it can only be made when all companies have reported their performance. We expect to achieve our target of an upper quartile position relative to other water and sewerage companies but our ranking is still to be confirmed by Ofwat.

This performance is mirrored across other customer satisfaction metrics including an upper quartile performance in the UK Customer Satisfaction Index covering all industries and we are the leading listed company for the Consumer Council for Water's customer satisfaction research.

We have continued to implement our wide ranging Customer Experience Programme. This programme focuses on a range of developments, some of which are about technology, to allow us to better respond to what customers want from us and deliver major improvements in our customer service. Last year we launched our new customer website and webchat facility making it easier for our customers to obtain information and contact us.

We've improved many of our key processes and introduced new services that customers want and value, such as Moving Home and Priority Services. The programme has also introduced improvements in digital contact channels and a new smartphone App.

One of our objectives in this area is to continue to provide an improving service to developers, local authorities and highway authorities. We are pleased to have outperformed our target for this measure, delivering a better overall standard of service. Our detailed performance in this areas can be seen on our [website](#).

The non-household retail market is now open to competition allowing business customers choice about who provides them with services such as billing, meter reading and customer services. If you are a business customer and want to know more, go to the Open Water [website](#).

Protecting and enhancing the environment

Outcomes:

- a) The North West's bathing and shellfish waters are cleaner through our work and that of others
- b) The natural environment is protected and improved in the way we deliver our services, and
- c) Our services and assets are fit for changing climate and our carbon footprint is reduced

Performance:

We have achieved eight out of eight measures. Out performance payments of £0.2m (water) and £3.7m (wastewater)

What do customers want?

North West customers are passionate about our coastlines, recognising the link between good bathing water, tourism and the economic health of our local communities. They expect us to protect and enhance the areas of natural beauty under our ownership and work to reduce our carbon footprint.

How have we done?

We are pleased to have been able to meet all eight of our measures in this area and are delighted that our environmental performance has been recognised by our regulators.

Our continued leading environmental performance is reflected in our 'Industry Leading Company' status as measured through the Environment Agency's annual assessment. We retained our 4-star performance for 2017/18. Further details are provided on the Environment Agency [website](#).

We continued to improve the level of compliance and reduce the level of risk at our wastewater treatment works in 2017/18. This improvement is the result of the acceleration of our expenditure programmes coupled with the benefits of the additional automation and control that we installed to provide enhanced on-site or remote monitoring and management of key assets within our treatment works. The improved performance has allowed us to out perform the target for the "maintaining of our wastewater treatment works" performance commitment.

We are delivering a wide-ranging programme which aims to improve the environment, in this five-year period. We have continued to make good progress in delivering this programme, having successfully delivered all of our 2017/18 schemes and having delivered some bathing water and river improvement schemes ahead of schedule.

We also abstracted less water from rivers which are covered by the abstraction incentive mechanism (AIM) than historical average levels and as a result earned an out performance payment against this measure. We are also at target for Ofwat's industry standard AIM measure.

Our sludge treatment and disposal activities continue to ensure that we meet our environmental requirements. We are continuing to make better use of this valuable resource, by promoting the use of sludge as an alternative to fertiliser and abstracting energy. We have made significant progress in increasing the quantity of energy generated from our sludge, with a target of producing 35% of our own electricity by 2020.

Our future performance

In September 2018 we will publish our business plan for the 2020-2025 (AMP7) period. This plan takes account of the impact of our performance during the current 2015-2020 (AMP6) period, through the incentive regimes that apply to the PR14 process.

To support this process we published and provided Ofwat with detail of our actual performance to date and our anticipated performance for the remainder of the AMP6 period against each of the AMP6 incentive mechanisms. Our AMP6 reconciliation submission is available via this [link](#).

There are eight PR14 incentive regimes, which generate adjustments to PR19 revenues or Regulatory Capital Value (RCV):

- **Water and Wastewater wholesale performance commitments** – the cumulative five year penalty or out performance payment for the financial performance commitments within each price control (Water and Wastewater) is calculated. If this is a penalty this is applied as a revenue reduction, if this is an out performance payment it is applied as a RCV uplift.
- **Household Retail performance commitments** – other than SIM we have one penalty only performance commitment, with any penalty applied to household retail cost to serve.
- **Service Incentive Mechanism (SIM)** – measures the number of complaints and the quality of the way companies handle complaints. Performance is assessed relative to other water companies, and full details of how incentives will be calculated are still to be determined by Ofwat.
- **Water and Wastewater wholesale totex** – the cumulative five year actual totex for each wholesale price control is compared against totex levels assumed at PR14. Approximately half of any under or overspend is shared with customers through revenue and RCV adjustments, which reduce or increase future bills.
- **Wholesale Revenue Forecasting Incentive Mechanism (WRFIM)** – annual adjustment to revenues to account for any over or under recovery of allowed revenue in previous years. A penalty is also applied if companies over or under recover by 2% more or less than the allowed revenue.
- **Household retail mechanism** – adjusts the allowed cost to serve to reflect differences between the actual number of customers in each cost to serve category and the number expected at PR14.
- **Land Sales** – reduces the RCV to reflect the net proceeds, after the deduction of all offsetting costs, of disposals of land.
- **Water trading incentives** – revenue adjustment applied for water trades to or from other water companies.

In addition to these eight incentive mechanisms, wholesale revenues and RCV will also be adjusted to reflect the finalisation of the adjustments from previous price review, which were determined and published by Ofwat in December 2017.

The net impact of these adjustments, including the prior AMP adjustments are set out in the table below.

Net impact of adjustments

	RCV	Revenue
Wholesale water	+£17.9m	-£0.6m
Wholesale wastewater	-£32.8m	-£0.3m
Household retail	-	+£14.1m
Combined	-£14.8m	+£13.2m

As the impact of changes to the RCV impacts upon revenues over a longer period, the net impact of these adjustments will be to increase an average customer bill in the AMP7 period by approximately £1 each year

The value of the incentive payments that we have included within the PR14 reconciliation submission, for our actual and forecast performance against our financial performance commitments is summarised in the table below.

We expect to end the AMP6 period in a net positive position, across the two wholesale price controls with a net out performance payment of £10 million.

This is made up from a £30 million out performance payment in the wastewater service partially offset by a £20 million penalty in the water service.

The anticipated performance, potential variability and key factors that could influence performance for each measure are set out in Section 2 of this document.

Actual and anticipated out performance payments and penalties for the remainder of the 2015-2020 period

Performance commitment	Actual Incentive (£m)			Forecast Incentive (£m)		AMP6 Total
	2015/16	2016/17	2017/18	2018/19	2019/20	
A2: Water quality events DWI category 3 or above	(0.4)	(0.6)	(0.7)	(0.9)	(1.2)	(3.9)
A3: Water Quality Service Index	0.2	(3.6)	(3.6)	(3.6)	(3.6)	(14.2)
B1: Average minutes supply lost per property (a year)	0.0	0.0	(6.0)	0.0	1.3	(4.6)
B2: Reliable water service index	(8.0)	(8.0)	(8.0)	(8.0)	0.0	(31.9)
B3: Security of supply index (SoSI)	0.0	0.0	0.0	0.0	0.0	0.0
B4: Total leakage at or below target	0.0	9.1	0.0	1.6	1.6	12.4
B5: Resilience of impounding reservoirs	0.0	0.0	0.0	0.0	0.0	0.0
B6: Thirlmere transfer into West Cumbria	0.0	0.0	0.0	0.0	21.2	21.2
C1: Contribution to rivers improved - water programme	0.1	0.2	0.2	0.2	0.0	0.6
Water service total (applied as revenue reduction) (12/13 prices)						(20.4)
S-A1: Private sewers service index	7.4	7.4	7.4	7.4	7.4	36.9
S-A2: Wastewater network performance index	0.0	0.0	0.0	0.0	0.0	0.0
S-B2: Sewer flooding index	0.0	(1.5)	0.0	(9.0)	(8.8)	(19.2)
S-C1: Contribution to bathing waters improved	0.0	0.0	0.0	0.0	0.0	0.0
S-D1: Protecting rivers from deterioration due to growth	0.0	0.0	0.0	0.0	0.0	0.0
S-D2: Maintaining our wastewater treatment works	0.0	0.0	0.0	0.0	(4.4)	(4.4)
S-D3: Contribution to rivers improved wastewater (Km)	0.0	0.4	0.4	0.1	(0.1)	0.8
S-D4a: Wastewater (category 1 & 2) pollution incidents	0.0	0.0	0.0	0.0	0.0	0.0
S-D4b: Wastewater category 3 pollution incidents	3.3	3.3	3.3	3.3	3.3	16.4
S-D5: Satisfactory sludge disposal	0.0	0.0	0.0	0.0	0.0	0.0
Wastewater service total (applied as an RCV uplift) (12/13 prices)						30.5

The values shown in the table above are subject to a number of factors that are not entirely within management control - most notably the weather. We expect to end the period with a net reward of up to £30 million.

Full details of the outcome delivery incentive mechanisms and the other PR14 incentive mechanisms are provided within the PR14 reconciliation document, which is published on our website.

Our expenditure, revenues and financial performance

Introduction

The PR14 price review process was structured around four separate price controls. Specific assumptions were made on revenues, costs and returns for our wholesale (water and wastewater) and retail (household and non-household) services. The PR14 price review also looked at overall UjW financeability and anticipated returns.

This section of the executive summary reviews performance against the wholesale and retail price controls and overall UjW wide financial performance.

Wholesale

Overview of the wholesale price controls

The wholesale price controls defined assumed levels of total expenditure (totex) for the water and wastewater price controls and used these assumptions as well as “pay as you go (PAYG) ratios” and “Regulatory Capital Value (RCV) run-off rates” to derive the assumed value of the closing RCV for each price control. Together these determine the amount of revenue that can be recovered by the company for each year of the AMP6 period to finance existing and ongoing investment and costs.

The determination defined the incentive regimes that are in place to reflect changes between allowed totex levels and actual totex levels, with the totex incentive regime designed to work together with the outcome delivery incentives to drive improvements in performance and efficiency.

Totex incentivisation

The totex investment regime takes a holistic view of capital and operating expenditure (capex and opex) to generate a total expenditure level (totex). The PR14 process defined an assumed level of totex for the water and wastewater wholesale businesses.

Any variance between the initial totex assumptions and actual expenditure over the full five-year period will be assessed through the totex incentive mechanism as part of the next price review in 2019. This mechanism means that if we have been able to make greater efficiencies than assumed in the FD, then approximately half of the saving would be retained by the company and approximately half would be returned to customers. Similarly, if our expenditure is higher than the determined allowance, approximately half of the increased expenditure would be recovered from customers and approximately half would be paid for by the company.

The impact of any net variance will be assessed as part of the PR19 price review process which concludes in 2020 and will then be reflected in customer bills during subsequent periods.

Interaction of operational and financial incentives

The totex incentive regime is designed to work alongside the ODI incentive regime to ensure that companies are incentivised to achieve efficiencies and innovation in their programmes and to deliver programmes of work which strike the right balance between expenditure and performance.

2017/18 financial performance – Wholesale

Wholesale expenditure for the first three years of the AMP6 period (12/13 prices)

Measure	Cumulative spend April 2015 to March 2018		
	Ofwat FD assumption	Actual	Variance
Wholesale totex (Water)	£1,388m	£1,528m	+£140m
Wholesale totex (Wastewater)	£1,755m	£1,924m	+£169m
Shadow RCV (March 2018)	£11,010m	£11,214m	+£204m

Information from APR Table 4B and 4C

Our wholesale totex expenditure, compared to the totex expenditure levels set out in the PR14 final determination is shown in the table above.

Expenditure in 2015/16 and 2016/17 was significantly higher than assumed across the wholesale controls. 2017/18 expenditure in water was in excess of the FD whereas 2017/18 wastewater expenditure was lower than assumed in the FD.

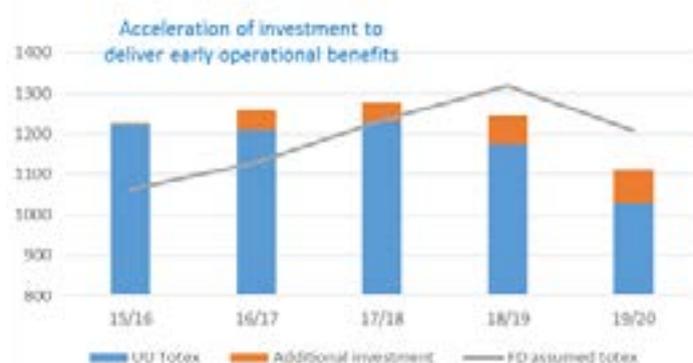
Wholesale expenditure acceleration

The key reason for the increased expenditure in the first three years of the period is because we chose to accelerate the expenditure programme to enable us to target better service levels to customers, improve performance against our outcomes and to drive future sustainable efficiency savings.

Despite this increase in expenditure in the first three years of the period, our current plans indicate that we should be able to out perform the efficiency challenge set by the FD and deliver our programmes of work for approximately £100m lower than the expenditure levels assumed in the FD.

In 2016/17 we committed to invest some of the totex out performance in a £100 million programme of resilience work, designed to provide additional customer and environmental benefits both over the rest of the AMP and in the longer term. We are now committed to increase this spend on resilience to £250 million.

Actual and forecast investment programme against that assumed at FD



Following publication of the FD Ofwat provided revised guidance (RAG 2.06) on cost allocation. This sets out that capital expenditures and associated depreciation of assets should be reported in the service of principal use of that asset, with recharges made to the other services that use the asset. This has resulted in approximately £97 million of totex being recorded in the wastewater service which would previously have been recorded in the water service.

NB The UU investment programme shown in this chart contains forecast data for 18/19 and 19/20

2017/18 financial performance – Retail

Household retail expenditure in 2017/18 (out turn prices)

Measure	Ofwat FD assumption	2017/18 Actual	Variance
Cost to serve excluding margin	£108.8m	£113.6m	£4.8m

Information from APR Table 2C

Overview of the retail price controls and incentives

The retail price controls determined the cost per customer and margin that could be recovered for providing retail services. Total revenue levels for the company will therefore vary depending on actual customer numbers.

There is no cost sharing mechanism for retail costs. Any variations in costs compared to the allowed level of costs impact company returns – not customer bills – in the period.

2017/18 performance – household retail

Our household retail performance in 2017/18 against the allowed cost to serve set out in the FD is shown in the table above.

Household retail operating costs in 2017/18 were £0.9 million lower than in 2016/17 (£114.5 million). This further reduction in our cost to serve has demonstrated the benefits that are being delivered through our customer experience programme. Our assumed cost to serve will not increase in line with inflation and will continue to reduce during the period, which will require us to continue to deliver further efficiency in our operations.

Our bad debt costs have benefitted from the positive impact of the introduction and uptake of billing and collections initiatives, including the successful rollout of our Town Action Planning initiative which engages with customers in our most deprived areas and has significantly increased the number of customers benefiting from our financial assistance schemes. This initiative recently resulted in us being given the award for “Excellence in Treating Customer Vulnerability” at the Credit Awards. This is a cross sectoral awards scheme which benchmarked our approach against initiatives in other industries, beyond the water sector.

Household bad debt has reduced to its lowest ever level of 4.2 per cent of regulated revenue, down from 4.3 per cent last year. Although our performance this year has been encouraging, bad debt will remain a challenge given the high levels of deprivation in the UUW region and will be an area of continued focus as we drive for further improvement.

Actual customer numbers were 3,391 higher than in 2016/17; however, mainly as a consequence of the increased take up of our social and support tariffs, retail revenues are lower than assumed in price limits and as a consequence operating costs exceeded household retail revenues (excluding internal recharges) by approximately £2.2 million.

UUW overall financial performance

Overview of the PR14 determination

Ofwat developed the PR14 FDs for all companies based upon a notional capital structure (rather than being based on actual individual company specific capital structures). It applied a common weighted average cost of capital for all (non-enhanced) companies of 3.60% to determine wholesale revenue allowances. Margins of 1% and 2.5% were applied to the household retail and non-household retail price controls respectively.

To demonstrate that the plan was financeable, the anticipated performance against a key suite of equity and debt financial indicators was set out as part of each company's determination.

In addition, Ofwat set out the assumed notional base case return against the company's regulatory equity. For UUW this value was 5.63%.

The overall determination and incentive package was therefore positioned to be sufficiently broad and challenging that companies needed to manage diverse risks and utilise available opportunities in order to earn a balanced return for investors, whilst delivering the best possible package of price and service to customers and the environment.

Overview of the PR19 business plan

All water companies, including UUW will be publishing and submitting their PR19 business plans to Ofwat in September 2018.

For UUW this process will set prices for the 2020 – 2025 period for four wholesale price controls (water resources, water network plus, wastewater network plus and bioresources) and the household retail price control.

2017/18 performance – UUW financial performance

Overall, we have been able to deliver a strong set of financial results for the year ended 31 March 2018.

We have seen higher Retail Price Index (RPI) inflation which has increased both revenues and our index-linked financing charge for the year, although we continue to maintain a strong balance sheet and solid credit ratings.

Over 2015-20 we have financing requirements totalling around £2.5 billion to cover refinancing and incremental debt, supporting our five-year investment programme, and we have now raised over £2.2 billion of this requirement. As part of this, we were the first UK utility to issue Consumer Price Index (CPI) linked debt in anticipation of Ofwat's transition away from calibration of price controls using RPI.

We have locked in a low cost of debt for 2015-2020, with an appropriate mix of index-linked and nominal debt; and our hedging policy means we are well placed to manage future financing costs. We have a liquidity position providing headroom to cover our projected financing needs through into 2020 and have published a five year, long term viability statement.

We have a responsible and sustainable dividend policy, in line with our policy of targeting an annual growth rate of at least RPI inflation through to 2020.

The following pages of this executive summary cover our financial performance in terms of our income statement, our financial position and then against a suite of key financial metrics. It then looks at the overall impact of this performance upon return as assessed through return on regulatory equity (RORE).

Additional detail is provided within Section 2: Regulatory Accounts.

Income statement

Our income statements for the years ending 31 March 2017 and 31 March 2018 are summarised in the table below. This should be read in conjunction with the high level commentary following the table and the detailed information provided within Section 2: Regulatory Accounts.

Financial measures for the years ending 31 March 2017 and 2018

Financial Measure	2016/17	2017/18
Revenue (£m)	£1,689.2	1,710.6
Operating profit (£m)	580.3	602.5
Profit before tax (£m)	382.1	371.7
Profit after tax (£m)	364.3	302.4
Equity dividends paid (£m)	242.7	311.1

Information from APR Table 1A

In 2017/18, revenue remained at approximately £1.7 billion, and was up £21 million from 2016/17 mainly reflecting an increase in our allowed regulatory revenue for the wholesale price control. Partly offsetting this increase, consistent with Ofwat's annual wholesale revenue forecasting incentive mechanism (WRFIM), revenue was reduced in 2017/18 by £10 million as actual volumes in 2015/16 were higher than our original assumptions.

Operating profit of £602 million was up £22 million from 2016/17 reflecting the £21 million increase in revenue, with lower operating costs being offset by an increase in depreciation and amortisation.

Profit before tax of £372 million was down £10 million as the £22 million increase in operating profit plus a £22 million fair value movement on financial instruments (from a gain of £5 million in 2016/17 to £27 million in 2017/18), was more than offset by a £53 million increase in net interest expense due to higher inflation on our index-linked debt.

Reported profit after tax of £302 million was down £62 million from 2016/17, with the main difference resulting from a deferred tax credit in 2016/17 of £58 million relating to changes in the Government's future planned tax rate.

Equity dividends paid in the year increased by £68 million compared to 2016/17, in line with our dividend policy. The main driver of this increase was distributed out performance which was up £59 million compared to the prior year.

Financial position

Our financial position for the years ending 31 March 2017 and 31 March 2018 is summarised in the table below. This should be read in conjunction with the high level commentary following the table and the detailed information provided within Section 2: Regulatory Accounts.

Financial position for the years ending 31 March 2017 and 31 March 2018

	2016/17	2017/18
Total assets (£m)	11,919	12,491
Total liabilities (£m)	9,647	10,199
Net asset value and total equity (£m)	2,272	2,292
(Decrease)/Increase in net cash (£m)	(3)	317
Net Debt (£m)	6,492	7,122
Ofwat RCV (£m)	10,565	11,010
“Shadow” Regulatory Capital Value (£m)	10,719	11,214
Gearing (%)	61.4	64.7

Information from APR Tables 1C, 1D, 1E and 4C

Net assets were consistent year-on-year, up only £20 million, with the £572 million increase in assets offset by a £552 million increase in liabilities, both impacted by continued significant investment in our capital investment programme. There was a £317 million increase in cash, mainly reflecting the timing of finance raised in the year.

Reported net debt (Table 1E) was up by £630 million. The reported net debt in Table 1E in 2016/17 excluded preference share capital of £130 million, subsequently included in 2017/18. Adjusting for this our underlying net debt increased by £500 million. The remaining increase primarily reflects accelerated regulatory capital expenditure, payments of dividends, interest and tax and the inflationary uplift on index-linked debt. In addition, during the year we re-couped some of our interest rate swaps to lock-in a lower rate of interest going forward. This resulted in us paying a cash settlement of £107 million, offset by a reduction in interest rate swap liabilities in the balance sheet. However, as regulatory net debt excludes interest rate swaps without a principal amount outstanding, this re-hedging activity has increased our reported regulatory net debt.

The “Shadow” regulatory capital value increased by £495 million as a consequence of the impact of RPI inflation on the measure, together with the size and the acceleration in our investment programme.

Reported gearing (which uses Ofwat RCV) increased by 3.3% to 64.7%. Adding preference share capital, 2016/17 gearing would have been 62.7%, so the underlying gearing increase was actually 2.0%. The aforementioned swap re-couping also contributed 1.0% to the overall increase.

The acceleration of totex spend has resulted in increasing gearing at the beginning of the AMP. This is due to the additional spend in the earlier years of the AMP increasing net debt, which is not yet reflected in RCV. It is expected that gearing will therefore reduce in the last two years of the AMP as the timing differences unwind. If calculated using the “Shadow RCV”, our 2017/18 gearing is lower at 63.5%.

As such, we would expect gearing to reduce to be close to the nominal gearing level of 62.5% assumed by Ofwat in setting the PR14 FD.

Financial metrics

Our performance against the key financial measures set out in the FD for the years ending 31 March 2017 and 2018 is summarised in the table below. This should be read in conjunction with the high level commentary following the table and the detailed information provided within Section 2: Regulatory Accounts.

Financial metrics for the years ending 31 March 2017 and 2018

Financial ratios	Notes	Ofwat FD assumption	2016/17 actual	2017/18 actual
Cash interest cover ratio (ICR)	1	3.28	5.61	6.04
Adjusted cash interest cover ratio (ACICR)	1	1.65	2.80	2.98
Funds from operations (FFO)/debt	1	10.25%	11%	11%
Regulatory gearing (net debt/RCV)	1	59.83%	61.44%	64.69%
Dividend cover (profit after tax/dividends paid)	1	1.39	1.50	0.97

Information from PR14 Final Determination company specific appendix – United Utilities and APR Table 4H

Notes:

1. Ofwat FD ratios are derived on a notional capital structure with a notional cost of debt and reflect 100% of IRE expensed in the income statement.

The interest cover ratios illustrate a company's ability to pay interest on its outstanding debt. The cash interest cover looks at the ratio of funds from operations (FFO) before the payment of interest, to cash interest payable. The adjusted cash interest cover adjusts the numerator by subtracting regulatory depreciation which is an approximation of the capital cost that would be incurred if companies were to maintain the RCV at the same level. Both metrics remain comfortably above the Ofwat FD assumptions.

The FFO/Debt ratio is calculated by taking the net cash generated from operating activities, adjusting for changes in working capital and dividing by net debt. This ratio is often used by credit rating agencies to look at the ability of companies to repay their debt and to fund their capital expenditure requirements. It should however, be noted that each credit rating agency has their own approach to the calculation of these ratios which may differ slightly from the calculations shown here. For example, applying Standard & Poor's (S&P's) usual methodology, which deducts all interest to derive FFO compared to Ofwat's metric which deducts cash interest only, S&P's FFO/Debt for 2017/18 would be far lower at around 9.7%, compared to 11.0% under Ofwat's FFO/Debt metric.

The debt to RCV gearing ratio measures the proportion of debt in a company's capital structure relative to its regulatory capital value. This ratio is often used by credit rating agencies to assess a company's level of leverage and capital strength. The movement on this metric is explained on the previous page.

Dividend cover shows the number of times the dividend can be paid from the distributable profits earned in each year. 2017/18 dividend cover is lower than assumed due to distributed out performance of £94 million during the year. Average dividend cover for the AMP to date remains well above 1.0.

Overall, the 2017/18 value of these metrics reflects the good set of results that we have been able to publish and support a solid A3 credit rating (as measured by Moody's Investor Services).

Return on Regulatory Equity (RORE)

The UuW FD set out the theoretical range of returns that UuW could expect to earn dependent on its actual performance in the period, with this return being expressed as a return on the regulated equity of the business (RORE).

The RORE value reported in our APR is designed to measure the returns (after tax and interest) that a company has earned by reference to the notional regulated equity, where regulatory equity is calculated from the RCV and notional net debt (62.5% of RCV). Our RORE in the first three years of the AMP6 period is described below.

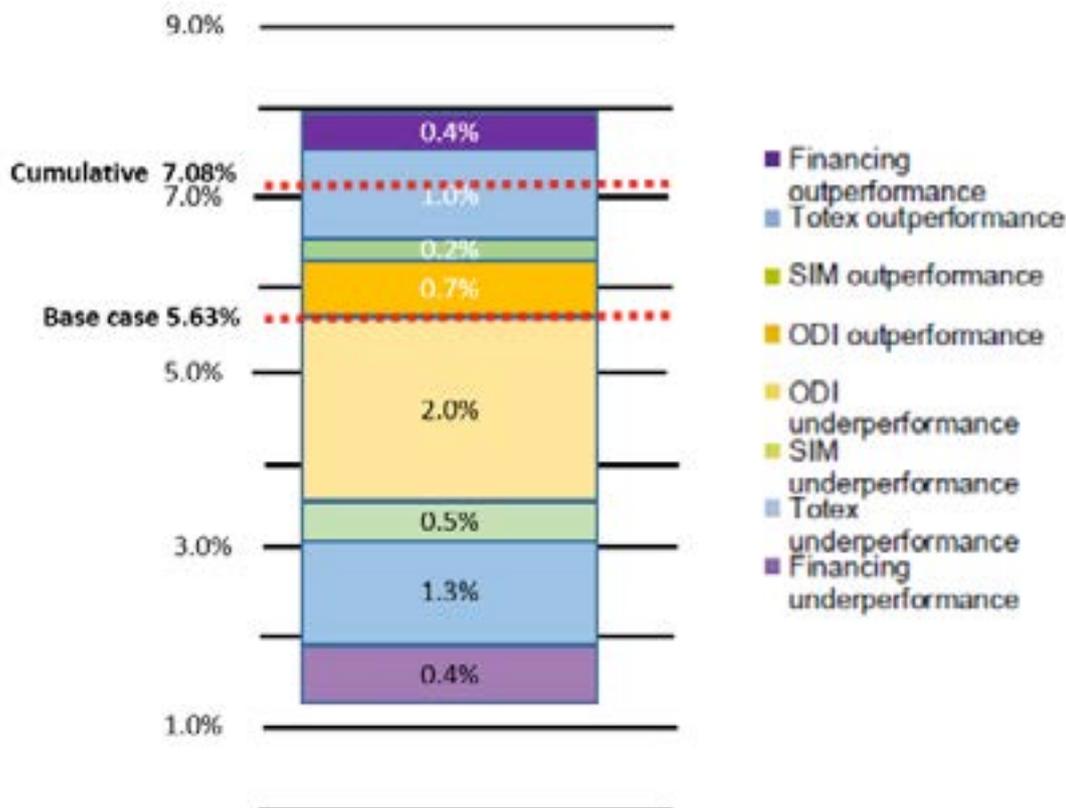
The notional base case RORE that was assumed in the FD was 5.63% and was assumed to be able to vary between 1.4% and 7.9%, depending upon actual performance in the period.

The position reported in our 2015/16 APR was 6.85%. Following additional guidance from Ofwat, this was restated to 6.30%. Overall RORE for 2016/17 was 7.26%, and RORE for 2017/18 was 7.67%, resulting in a cumulative RORE for the AMP to date of 7.08%.

Although this value is within the “expected range” published by Ofwat and exceeds the assumed base case, comparisons between these two values need to be made with care. The assumed return within the FD is based on a “theoretical, efficient company with a notional capital structure and a notional cost of debt”, whereas the actual values reflect the UuW actual company-specific position. This means that the numbers are not directly comparable.

The impact of our operational and financial performance on the key factors that are used to determine RORE is set out below.

Impact of operational and financial performance on RORE



Wholesale totex and retail operating costs: Although we have incurred significantly more wholesale totex than assumed in the first three years of the AMP6 period, the majority of the increased expenditure has been the acceleration of expenditure as opposed to additional spend.

On a like for like basis we are planning to deliver the scope of work assumed at PR14 for £100 million less than the total level of expenditure assumed in the FD. We have however, committed to invest an additional £250 million in the AMP6 period to improve our operational resilience and we therefore expect to report an overspend against the allowed totex of c£150 million. This overspend is assumed to be spread equally between 2017/18 and the remaining two years of the period with the 2017/18 proportion of this overspend being included in the current year RORE calculation.

The base case RORE figure of 5.63% assumed that non-household retail margin would be earned for the full 12 months. Removing the associated margin reduces the 2017/18 base case RORE by 0.11%.

Increased pension deficit recovery and compensation costs are not accounted for in the totex incentive mechanism and as such do not feature in the RORE calculation and have to be funded by the business.

Outcome delivery incentives – In 2015/16 we earned a net out performance payment of £2.5 million, and in 2016/17 the net out performance payment was £6.7 million. In 2017/18 we incurred a net penalty of £7.0 million, resulting in a reduction to the 2017/18 base case RORE of 0.19% or an uplift of 0.02% on a cumulative basis. These figures only represent the first three years of performance, whereas actual out performance payments or penalties are calculated at price control level at the end of the AMP.

SIM – This is a measure of relative intercompany performance. We believe we have performed well on SIM during 2017/18, but the cumulative AMP position has been affected by incidents in water services and extreme flooding events. As such we have not assumed any penalty or out performance payments on the SIM measure in the 2017/18 or current cumulative positions.

Financing – The balance of the increase in the calculated actual RORE relates to financing. Ofwat's central case RORE value for UUW was based on a theoretical, efficient company with a notional capital structure and a notional cost of debt. This means that the values are not directly comparable with the actual performance calculated based on actual, company specific, figures.

Financial flows

Ofwat's vision for the water sector in England and Wales is one where customers, the environment and wider society have trust and confidence in vital public water and wastewater services.

As described above in PR14 Ofwat's central case RORE value for each water company was based on a theoretical, efficient company with a notional capital structure and a notional cost of debt.

To improve the transparency concerning financial flows to investors Ofwat require companies to complete and submit data for the three years of the AMP6 period and publish the data for the current year in their APR.

We support the objective of increasing financial transparency and have published the information for all three years in Section 2.6 of our APR. A summary of the information from the 2017/18 table is provided in the table below.

As expected, total actual earnings reported within the financial flow metrics will be different from total RORE. This is because, unlike RORE, financial flows also incorporates the out/under performance in corporation tax as well as the actual performance adjustments from 2010-15. Financial flows also adjusts the base return to adjust for actual gearing, whereas the RORE uses notional gearing of 62.5%.

Financial flows for the year ending 31 March 2018

Financial ratios	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
Adjusted return on regulatory equity	6.24%	6.04%	6.24%
• Financing	0.00%	3.78%	3.96%
• Operational performance	0.00%	-0.77%	-0.80%
Total earnings	6.24%	9.05%	9.40%
Total shareholder return	9.97%	12.79%	13.14%
Net dividend	4.00%	7.65%	7.90%
Retained value	5.97%	5.14%	5.24%

Information based upon current Ofwat guidance. Values may change in future years if guidance changes

Financing out performance has resulted in a total shareholder return in excess of the % assumed by Ofwat at PR14. This has allowed us to return a higher amount to investors.

Given our gearing is closely in line with Ofwat's notional capital structure the differences in return calculated on the company's notional and actual equity are relatively small.

The detailed methodology of the financial flows data remains subject to change. Once the methodology has been finalised and we have had sight of other companies' information we will be in a better position to provide meaningful and supported comparative commentary.



Risk and compliance statement

UUW Board's Risk and Compliance Statement 2017/18

The Board of United Utilities Water Limited (the Company or UUW, where the context requires), is required by Ofwat to provide an annual statement confirming its compliance with the relevant statutory, licence and regulatory obligations for the provision of services to its customers for the report year 2017/18. This statement is complementary to other statutory Board statements.

The Statement

The Board considers that the Company has applied its processes and internal systems of control in a manner that has enabled it to satisfy itself, to the extent that it is able to do so from the facts and matters available to it, that the Company:

- Has a full understanding of and has complied with its statutory, licence and regulatory obligations in all material respects in 2017/18.
- Has taken appropriate steps to understand and meet customer expectations.
- Has sufficient processes and internal systems of control to fully meet its obligations.
- Has appropriate systems and processes in place to identify, manage and review its risks.

Departures from this statement are set out in a table following the compliance statement.

Obligations

The Board manages the effective and efficient delivery of its obligations and operation of everyday activities within the business by the interaction of:

- **Authorisations, approvals and procedures.** These are set out in the United Utilities Group PLC (UUG) Internal Control Manual (ICM) to provide guidance to employees as to the system of internal controls that they must follow when acting on behalf of UUW and UUG as a whole. The ICM sets out a framework within which underlying detailed procedures and policies operate.
- **Policies.** The Board has adopted an overriding set of business principles. These are supported by a range of underlying policies that provide guidance to its employees as to how they should conduct themselves when acting on behalf of UUW and UUG as a whole. Everybody working for or on behalf of UUW must comply with the policies (to the extent they are applicable to their roles). Failure to do so may result in disciplinary action being taken. This could lead to dismissal and possible civil or criminal proceedings in serious cases.
- **Governance and control.** The Board delegates responsibility for specific matters to a number of committees and working groups. This provides a framework that employees are expected to be aware of and comply with where relevant to their role to ensure business decisions are taken in accordance with best business governance practices.

To oversee and take decisions affecting the execution of its obligations, the U UW board:

- Receives and reviews performance reports from the relevant employees of the Company.
- Receives and reviews reports and presentations from the UU Corporate Audit Team, the financial and technical Auditors.
- Receives and reviews reports and presentations from the wholesale, domestic retail, business retail, and finance directorates.
- Has access to executive and senior managers in the Company to verify information.

Should a significant regulatory risk or issue materialise during the report year then U UW will update Ofwat accordingly to demonstrate that the company is aware of and is responding appropriately to manage that risk or issue. **No such issues arose in 2017/18.**

Processes and systems

The directors have a reasonable expectation that the processes and systems of control the company uses are adequate for it to meet its obligations. This opinion, taking into account the relatively stable and regulated nature of the business is based, amongst other matters, upon a review of the company's performance for 2016/17, the results of the annual management control self-assessment, the work of Corporate Audit and a review of the company's risk and issues process and register.

In respect of this Statement, assurance is provided by:

- **Using U UW's established processes and methodologies for reporting performance.** This requires data providers, their managers and business unit directors to produce and approve Performance and Compliance Statements that set out the evidence to support the reported performance and control checks that have been applied. Operational performance data is collected at month 6, month 9 and at year-end.
- **Comparing the reported outturn performance with our company business plan targets, regulatory targets and predicted future performance.** This exercise allows variances to be identified and explored. Where required, explanatory statements are sought from business managers. These statements are analysed and assessed by the Economic regulation and strategy Team and findings are reported to the relevant Executive Directors, with any material issues highlighted to the U UW Board.
- **Business Unit Directors are required to complete an annual management control self-assessment.** This assessment provides confirmation that reporting processes and systems of control are robust, and any actions identified during the report year have been addressed, or have actions scheduled.
- **Reviews are undertaken by U UW's Corporate Audit team and Technical Auditor of the Company's processes, risks and controls.** Their findings are reported to the Board to aid the Board's decision to approve the annual Risk and Compliance Statement.

Where material issues are identified and/or the Board considers it is unable to support the expectations of the Statement then exceptions are set out in a table at the end of this statement.

Risk Management

Our risk management framework supports our strategy and long-term resilience for the benefit of our customers, shareholders and other stakeholders.

In our day-to-day operations we encounter a wide variety of risks which can challenge the quality, cost-effectiveness and timescales for the delivery of our aims and ambitions. We identify and plan for mitigation of these risks under our established risk management framework which includes:

- An enterprise-wide approach to risk management;
- Oversight and control of risk through a well-established governance and reporting process;
- A risk assessment and management process which aligns to ISO 31000:2018; and
- Training materials, accessible policies and guidance to help our people to identify and manage risk in a consistent manner.

Individual business areas and functions take responsibility for identifying, quantifying, communicating and controlling the risks relevant to their business activities. We use a forward-looking approach to take into account new and emerging areas of concern and the long-term impact of risk. The identified risks cover a wide range of potential events including regulatory, legal, core operations, service and hazard risks.

Our approach aligns with the UK Corporate Governance Code and includes reports to the Group Board for every full and half year statutory accounting period so that the Board is in a position to:

- Determine the nature and extent of the principal risks it is willing to take in achieving its strategic objectives;
- Oversee the management of those risks and provide challenge to executive management where appropriate;
- Express an informed opinion on the long-term viability of the company; and
- Monitor risk management and internal control systems and review their effectiveness.

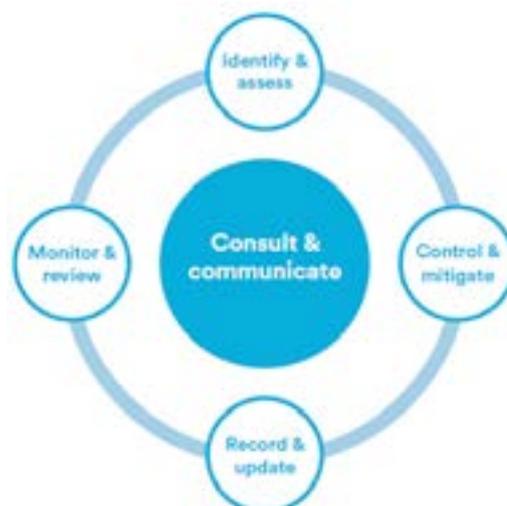
The approach to corporate risk management and principal risks and uncertainties are set out in the [United Utilities Group PLC annual report and financial statements](#).

In respect of regulatory reporting UUW has maintained its tailored risk management and assurance approach that has been used in our previous regulatory reporting periods. This process identifies high-risk elements of our reporting and ensures that action plans are established to manage or mitigate the risks and appropriate governance and assurance is in place.

The regulatory reporting risk assessment process and final assurance plan for our 2017/18 regulatory reporting are set out on the [UU web site](#):

Appendix 1 of the Annual Performance Report provides confirmation that this assurance plan has been implemented and sets out the findings of that assurance.

Risk assessment and management process adapted from ISO 31000:2018



Key reporting requirements

Corporate governance

United Utilities is fully compliant with the UK Corporate Governance Code, which is consistent with Ofwat's principles on leadership, transparency and governance, as set out in the UUW Code on board leadership, transparency and governance, published on 27 June 2017. The Code can be found via the attached [link](#).

Confirmation of sufficient financial and management resources (licence Condition F6A)

The directors have issued a certificate under Condition F6A of the Licence stating that the Company will have available to it sufficient financial and management resources and facilities to enable it to carry out, for at least 12 months, its regulated activities. This certificate also confirms that all contracts entered into with any associated company included all necessary provision and requirements concerning the standard of service to be supplied by the company to ensure that it is able to meet all its obligations as a water and sewerage undertaker. This certification statement can be found in Section 2.5 of our 2017/18 Annual Performance Report.

Confirming of availability of rights and assets (licence condition K)

The directors have issued a certificate as required by paragraph 3.1 of licence condition K, stating that as at 31 March 2018, if a special administration order had been made under section 23 of the Water Industry Act 1991 in respect of UUW, the company would have had available to it sufficient rights and assets (not including financial resources) to have enabled the special administrator to manage the affairs, business and properties of the company so that the purpose of the order could have been achieved. This certification statement can be found in Section 2.5 of our 2017/18 Annual Performance Report.

Trading with associates (licence condition F6)

Directors and senior managers of UUW have declared, to the best of their knowledge, that all appropriate transactions with associate companies have been disclosed and that UUW complies with the objectives and principles of Regulatory Accounting Guideline (RAG) 5.07. Information in respect of transactions between UUW and any other business or activity of the appointee or associated company is set out in Section 2.5 of our 2017/18 Annual Performance Report.

Links between directors pay and standards of performance (Water Industry Act section 35A)

As required by section 35A of the Water Industry Act 1991 UUW has published a Statement of directors' remuneration and standards of performance, which can be found in Section 2.5 of our Annual Performance Report. Included within this statement are details of the arrangements and the remuneration that have been paid or become due during 2017/18 to the directors of the company as a result of arrangements for linking the remuneration of the directors of the company to standards of performance in connection with the carrying out by the company of the functions of a relevant undertaker.

Maintaining investment grade credit rating (licence condition F6A.6)

UUW has long-term credit ratings of A3 from Moody's and A- from Standard & Poor's, both on stable outlook. Assuming no significant changes to existing ratings agencies' methodologies or sector risk assessments, UUW aims to maintain, as a minimum, credit ratings of A3 with Moody's and BBB+ with Standard & Poor's.

Outcome delivery

Performance against the outcomes and performance commitment targets, set out in the PR14 final determination, is monitored on a monthly basis throughout the business, as part of internal company scorecard reporting. Annual and longer-term performance summaries are also reported on a regular basis through the year to the U UW Board and to our customer challenge group YourVoice.

Full details of the 2017/18 performance against these outcomes along with a view of potential longer-term performance is included within Section 1.1 of our 2017/18 Annual Performance Report. Actions that are being undertaken to address any measures where we have not met the target are also set out within the report.

Condition M – Provision of information

U UW has retained the governance framework in place for regulatory reporting purposes in prior years, which has allowed it to continue to monitor performance against its AMP6 regulatory targets to determine whether the Company is meeting customer expectations.

Signed on behalf of the Board



Steve Mogford
Chief Executive Officer



Dr John McAdam
Chairman

This statement was approved at a meeting of the Board of directors of United Utilities Water Limited on 25 June 2018 and signed off on its behalf by Dr John McAdam, Chairman and Steve Mogford, Chief Executive Officer

2017/18 compliance statement – departures from the statement

The Board considers that the Company has applied its processes and internal systems of control in a manner that has enabled it, to the extent that it is able to do so from the facts and matters available to it, to identify material departures from the obligations as set out below:

Description of	Purpose of duty / obligations	Disclosure
Environmental Permitting (England and Wales) Regulations 2010	WwTW discharge permit compliance	<p>Four WwTW have been classified as failing their discharge permits in 2017/18 and we have achieved an overall compliance of 98.8% for the Environmental Agency's Environmental Performance Assessment (EPA) % discharge compliance measure.</p> <p>This level of performance is an improvement on the ten works which failed their permits in 2015/16 and five works which failed their permits in 2016/17 and is ahead of the 2017/18 target set for the performance commitment, "maintaining our wastewater treatment works"</p>
Water Industry Act 1991 Water Supply Requirements	Duties of water undertakers with respect to water availability	<p>As a result of the Habitats Directive the Environment Agency (EA) will revoke our abstraction licence from Ennerdale Water.</p> <p>UW has implemented a series of short-term measures to mitigate the risk to supply, with a long-term solution to transfer water from Thirlmere reservoir to the West Cumbria supply zone now underway.</p>
Defra statement of obligations -	National Environmental Programme (NEP) 5	<p>As part of the 2014 price review process, our CEO Steve Mogford wrote to inform Ofwat and the Environment Agency (EA) that we would not be able to meet the preferred consent dates for three projects, but that we would seek to deliver these projects as early as practical.</p> <p>Following the PR14 final determination, we worked with the Environment Agency to agree a number of revisions to the environmental improvements programme, with these changes being formalised in "NEP5". As part of this process we agreed revised dates for the three projects highlighted in Steve Mogford's letter.</p> <p>We report our performance against both the original environmental programme and the NEP5 environmental programme in our APR.</p> <p>Two subsequent changes have occurred since the NEP5 programme was finalised as a result of which we are seeking to replace schemes CHR0012 (WFD) and Manchester Ship Canal (F1a) with equivalent schemes at Motherby and Barrow Nook. Full details of the proposed exchanges are set out in the UW PR14 reconciliation submission, which is published on our website.</p>



1. 2017/18 performance

Introduction and coverage

This section of our Annual Performance Report sets out how we have performed against the service, expenditure and revenue assumptions made in the 2014 price review and is set out in the following sections:

- 1.1 Outcome delivery
- 1.2 Wholesale totex
- 1.3 Wholesale revenue and current cost financial performance
- 1.4 Retail expenditure and revenues

How this information relates to other sections of the APR

The other sections of the APR and how they relate to the information contained within the 2017/18 performance section are summarised below:

- **The Regulatory Accounts** which support much of the information used in Section 1 are set out in Section 2.
 - The detailed pro forma tables that are specified by Ofwat and populated by all water and sewerage companies are included within the regulatory accounts.
- **Appendix 1** sets out the assurance that has been undertaken to support the information contained within the APR.
- **Appendix 2** provides detail of the calculations used to support our “index measures”.

Related publications

Two key documents that support the information or use the information set out in this section of our APR are:

- **Detailed technical explanations** of our outcomes and performance commitments are set out in the document “Outcome definition documents” which is published on our website, and is available via this [link](#).
- **PR14 reconciliation** – This sets out how our anticipated performance against all of the PR14 (AMP6) incentive mechanisms would translate into revenue and AMP7 opening RCV adjustments, through the PR19 process and the impact that this would have on average customer bills. This document is published on our website.

As each company developed their own performance commitments for the AMP6 period, it is difficult to compare performance between companies. To begin to allow a more meaningful comparison to be made, we have worked with regulators and the rest of the water industry to develop a suite of comparative information and performance measures.

These measures are still subject to different interpretations between companies, but do provide a view of relative performance. This information will be available on the [Discover Water website](#).

1.1) Outcome delivery

Supporting data tables (See Section 2.5)

Table 3A sets out our performance against our eleven outcomes and twenty seven performance commitments (PCs). For each PC table 3A sets out the actual 2017/18 performance and compares this to the 2017/18 performance target and to performance levels in previous years. Where relevant it also shows whether this performance would generate a financial out performance payment or penalty and whether we are anticipating that we will achieve an overall penalty or out performance payment over the full five-year period.

A number of our PCs are indices made up from a basket of sub measures. Performance against each of these sub measures is set out within **Table 3B** “sub measure performance table”. Details of the calculations used within these indices are set out in **Appendix 2**

Table 3C provides information on the four water abstraction sites in the UuW region which are subject to abstraction incentive mechanism. The level of abstraction from these four sites is also assessed within our water service PC “C1 Contribution to rivers improved – water service”.

Table 3D provides details of the build-up of our Service Incentive Mechanism (SIM) score this is also discussed within the commentary to our retail and customer service PC “A-1: Service incentive mechanism (SIM)”.

Overview of our performance

At PR14 we developed five outcomes and twenty seven performance commitments (PCs). Twenty one of these PCs had financial outcome delivery incentives (ODIs). All of our AMP6 ODIs are ‘end of period’, meaning they are reconciled at the end of the five year period, rather than during the period.

To seek to manage the challenges set by our PCs we accelerated our investment programmes and began to implement a ‘systems thinking’ approach which integrates the use of our assets, leverages real time data from our assets and employs new work processes and technology.

This approach has continued to bring improvements in our underlying operational performance, although due to tightening targets in the water service we have incurred a net penalty of £7 million in 2017/18, which takes the net position for the three years to date to an out performance payment of £2 million.

Targets for the final two years of the period continue to get tougher. We do, however, believe that in the round we should be able to meet this challenge and expect to earn a net out performance payment against our ODIs of up to £30m.

The anticipated position for each PC is set out below. Details of how this performance would impact upon allowed revenues and customer bills in AMP7 is set out in the document “**PR14 reconciliation**”, which is published on our website.

Coverage of the following section of the APR

For each of our ten water service, eleven wastewater service and four household retail performance commitments, this section of the APR details:

- The actual level of performance attained from 2015/16 to 2017/18.
- The anticipated levels of performance in 2018/19 and 2019/20.
- Instances where performance has, or is expected to, exceed the deadband level and therefore trigger the application of the outcome delivery incentive (ODI).
- The expected levels of penalty or out performance payments generated through the ODIs and the methodology utilised to calculate that position.
- Commentary detailing the internal and external factors that have influenced the levels of performance seen over the AMP.
- Commentary detailing the future risks, opportunities and uncertainties that could influence the forecast position.

It must be noted that future performance will be subject to a number of factors, many of which are outside of our direct control.

1.1 a) Water Service performance commitments

2017/18 Annual performance summary

Performance against our water service outcomes in 2017/18 and the cumulative performance in the AMP6 period to date, is set out in the table below. Further information on each measure is provided within this section of our Annual Performance Report, with details of the calculation of the index scores and associated incentives provided in Appendix 2.

Water Service Operational Performance Summary (2017/18)

Performance commitment	Actual			Performance Commitments		Incentives		
	2015/16	2016/17	2017/18	2017/18	Pass / Fail	Impact	2017/18 Annual (£m)	2017/18 Cumulative (£m)
A1: Drinking Water Safety Plan risk score	4.3	4.3	4.3	<= 4.3	Pass	Reputational	N/A	N/A
A2: Water quality events DWI category 3 or above	35	22	27	<= 10	Fail	Penalty	(0.745)	(1.788)
A3: Water Quality Service Index	120.465	116.923	98.645	>= 145.9	Fail	Penalty	(3.619)	(7.011)
B1: Average minutes supply lost per property (a year)	16:42	13:33	13:09	<= 12:00	Fail	Penalty	(5.962)	(5.962)
B2: Reliable water service index	16.447	77.840	70.827	>= 100.0	Fail	Penalty	(7.974)	(23.922)
B3: Security of supply index (SoSI)	100.00	100.00	100.00	= 100.0	Pass	At target	0.000	0.000
B4: Total leakage at or below target	10.80	23.40	9.10	>= 0	Pass	Deadband	0.000	9.148
B5: Resilience of impounding reservoirs	161.61	164.25	165.42	>= 164.4	Pass	No reward	0.000	0.000
B6: Thirlmere transfer into West Cumbria	2	5	25	>= 21	On track*	At target	N/A	N/A
C1: Contribution to rivers improved - water programme	36.9	82.6	80.6	>= 6.6km	Pass	Reward	0.185	0.426
D1: Delivering our commitments to developers, local and highway authorities	95%	98%	94%	>= 93%	Pass	Reputational	N/A	N/A
E1: Number of free water meters installed	27,197	32,447	36,615	>= 57,394	Fail	Reputational	N/A	N/A
Water Service (net penalty) £m							(18.115)	(29.109)

*The Thirlmere ODI would only earn a penalty or out performance payments in 2019/20, annual performance assesses if delivery is on track to achieve this target.

Forecast future performance

Actual performance against our water service outcome delivery incentives in the first three years of the AMP6 period, together with forecast performance for the remaining two years of the period, is set out in the table below. Further information on each measure, including the rationale and potential risks and opportunities associated with the future performance projections is set out for each measure.

Information on the way that the predicted performance and incentive payments would impact upon bills in the 2020 – 2025 period (AMP7) is set out in “United Utilities Water PR14 reconciliation”, which is available on our [website](#).

It must be recognised that performance against many of the outcome delivery incentives in the table below will be subject to a number of factors, which are at least in part outside of our direct control. Therefore the projections set out in the table below are indicative values only.

Performance commitment	Incentive type	Actual*				Forecast*		Projected AMP6 performance
		2015/16	2016/17	2017/18	Current financial position	2018/19	2019/20	
A2: Water quality events DWI category 3 or above	Penalty only	-0.4	-0.6	-0.7	-1.8	-0.9	-1.2	-3.9
A3: Water Quality Service Index	Reward and penalty	0.2	-3.6	-3.6	-7.0	-3.6	-3.6	-14.2
B1: Average minutes supply lost per property (a year)	Reward and penalty	0.0	0.0	-6.0	-6.0	0.0	1.3	-4.6
B2: Reliable water service index	Reward and penalty	-8.0	-8.0	-8.0	-23.9	-8.0	0.0	-31.9
B3: Security of supply index (SoSI)	Penalty only	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B4: Total leakage at or below target	Reward and penalty	0.0	9.1	0.0	9.1	1.6	1.6	12.4
B5: Resilience of impounding reservoirs	Penalty only	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B6: Thirlmere transfer into West Cumbria	Reward and penalty	0.0	0.0	0.0	0.0	0.0	21.2	21.2
C1: Contribution to rivers improved - water programme (NEP schemes and abstraction changes at 4 AIM sites)	Reward and penalty	0.1	0.2	0.2	0.4	0.2	0.0	0.6
Water services net: 2015/16-2017/18					-£29.1m	Water services net AMP6		-£20.4m

The numbers in table above have been rounded to one decimal place therefore the annual penalty and out performance payments may appear not to add up to the amounts reported in the current financial position and project AMP6 performance columns. Reputational only performance commitments are not included in the table.

Relative intercompany performance

We have measured our water performance in AMP6 against the twelve stretching performance commitments shown in the tables above. We have out performed our leakage performance commitment for the last three years, reflecting customer's growing desire to see less water lost and putting us in a good position to go further in AMP7. We have also maintained a healthy supply-demand balance, reflected in the Security of Supply Index, and supported the improving condition of rivers around the region.

Our experiences in 2015 showed how individual events could test the resilience of our systems and company. Following two category five water quality incidents and two boil water incidents which affected large groups of customers, the Drinking Water Inspectorate (DWI) challenged us to deliver 'a complete transformational change'. We worked closely with the DWI to refocus on reducing inherent operational risk and improve resilience. Many of these programmes of work, which were not originally part of the AMP6 investment programme, have been formalised as notices in agreement with the DWI. The transformation is underpinned by our 'back to basics' approach, ensuring that water quality is at the heart of our culture and decision making.

Index measures, such as the Water Quality Service Index and Reliable Water Service Index, have proved challenging as individual impacts on specific sub measures have masked good performance against others. In AMP7 we will disaggregate many of the measures from these indices to make sure they are more transparent and engaging for customers.

Our performance last year across a range of measures published on the Discover Water website showed our performance to be around industry average performance. Performance against six of the Discover Water measures was slightly worse than industry average, three were above industry average and one was average. Comparable data for 2017/18 is not available until later in the year; however, we anticipate our comparable performance will improve slightly.

Discover Water webpage



Line 1 A1 Drinking Water Safety Plan risk score

Performance Summary

We met our performance commitment for this measure in 2017/18 and we are anticipating that we will continue to meet our performance commitments for the remaining two years of the AMP.

Measure description

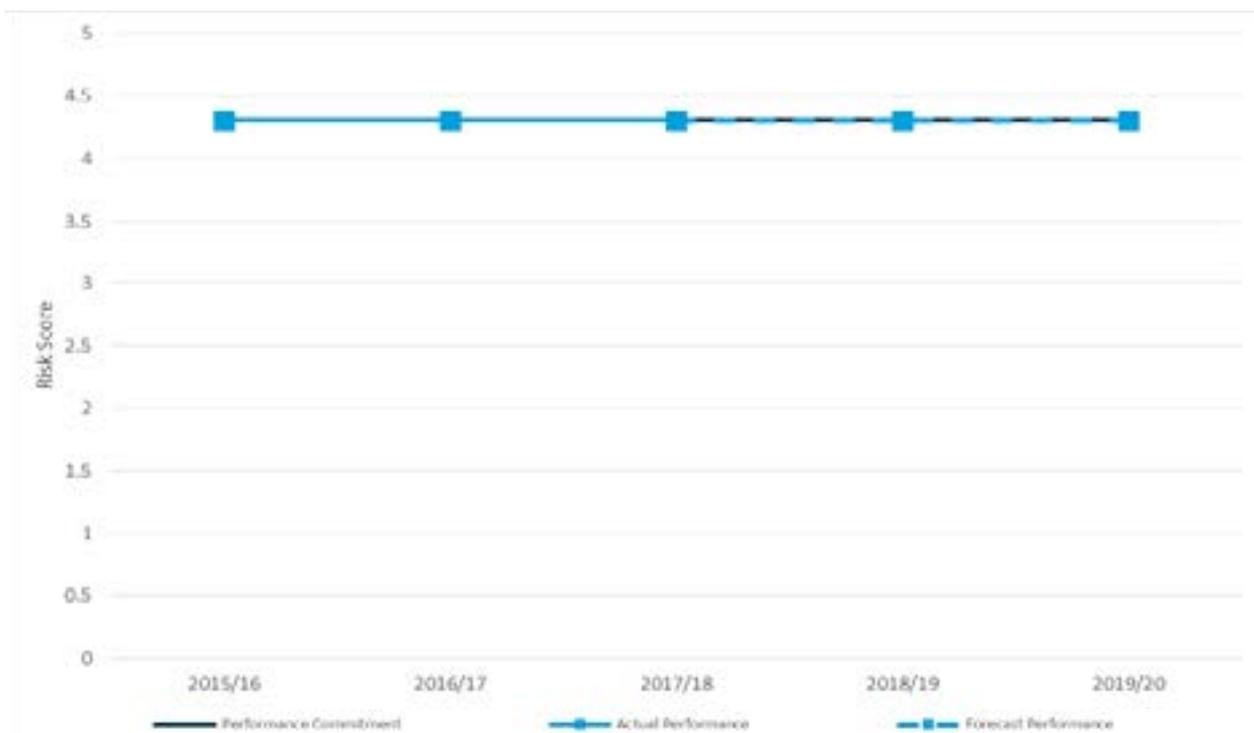
This performance commitment measures the level of risk identified through the drinking water safety plan process, with the target designed to ensure that risk levels do not increase. The original performance commitment target for this measure that was included within our business plan and confirmed in the FD was 3.9. This value was based upon the DWI reporting requirements at that time and which had been used for previous years reporting.

Since the FD was published, there has been a change in DWI reporting requirements as set out in DWI Information Letters 02/2014 and 01/2015. This means that risk reporting has moved away from hazardous events to hazards. One hazardous event may have several hazards associated with it and this has resulted in an increase in the number of risk scores and consequently the number of elevated risks scores. Based upon the revised methodology the like-for-like score would be 4.3.

Actual and forecast performance for the 'Drinking Water Safety Plan risk score' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	4.3	4.3	4.3	4.3	4.3
Actual/Forecast	4.3	4.3	4.3	4.3	4.3
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	Reputational	Reputational	Reputational	Reputational	Reputational

Drinking Water Safety Plan risk score - AMP6 actual and forecast performance against performance commitment



Overview of performance to date

From 2015 our average DWSP risk score has been consistent at 4.3, meaning that we have met our performance commitments for the first three years of AMP6. There have been no significant incidents or events which have affected the performance attained so far throughout the AMP.

Our AMP6 starting average DWSP risk score of 3.9 was calculated in July 2013 using data from the Drinking Water Safety Plan database at 30 June 2013. Following the setting of this position, DWI Information Letters 02/2014 and 01/2015 and their associated Annexes outlined updated regulatory reporting requirements for water company DWSP risk assessments. In response to these Information Letters we have carried out significant information technology alterations to the DWSP management system to ensure we meet the regulatory requirements. The main changes, which have impacted the average DWSP risk score are:

- Reporting by hazardous events rather than hazards. Each hazardous event may have more than one hazard associated with it resulting in an increase in the number of hazardous events.
- Splitting of consumer hazardous events from District Meter Zone (DMZ) level into Water Supply Zone (WSZ). This has resulted in an increase from 33 consumer risk assessments to 224 water supply zone risk assessments.

The changes above have resulted in an increase in the number of hazardous events, the average risk score and the number of hazardous events with a risk score of 10 and above.

Penalty or Out performance payments

This is a reputational measure with no financial incentive.

Lessons Learnt and Action Plan

It is in customers' interests not to increase unacceptable risk to water quality and we will continue to deliver activities to improve the robustness of our existing control measures as part of our water transformation programme.

There would need to be a significant change in the number of hazardous events that would be considered to be providing an unacceptable risk to water quality for there to be a change in this forecast.

Anticipated Performance Years 4 and 5

Performance throughout the remainder of the AMP is expected to remain at the risk level of 4.3.

Future performance - risk, issue, concern, change or opportunity

1. Changes to the Water Quality Regulations 2016 as a result of changes to the EC Directive to introduce risk based sampling - Amendments to the DWSP may be required in order to meet the revised regulatory requirements. This is likely to involve the addition of more hazards may result in additional lines within the data return which could potentially impact the overall risk score.
2. Ongoing review of the DWSP system - We are currently centralising our DWSP process. As part of this a comprehensive review is being carried out involving reassessment of risks and associated site visits, whilst this may lead to changes in risk scores on individual sites it should not impact the overall average risk score.
3. We are considering seeking accreditation of our DWSP process to ensure it is in line with BSEN (international standard for risk management) - Changes to the current DWSP methodology may be required to ensure accreditation is attained.

Line 2 A2: Water quality events DWI category 3 or above

Performance Summary

In 2017/18 we failed this measure and incurred a penalty of £0.745 million and we are anticipating that over the five years we will incur a total penalty of £3.875 million.

Measure description

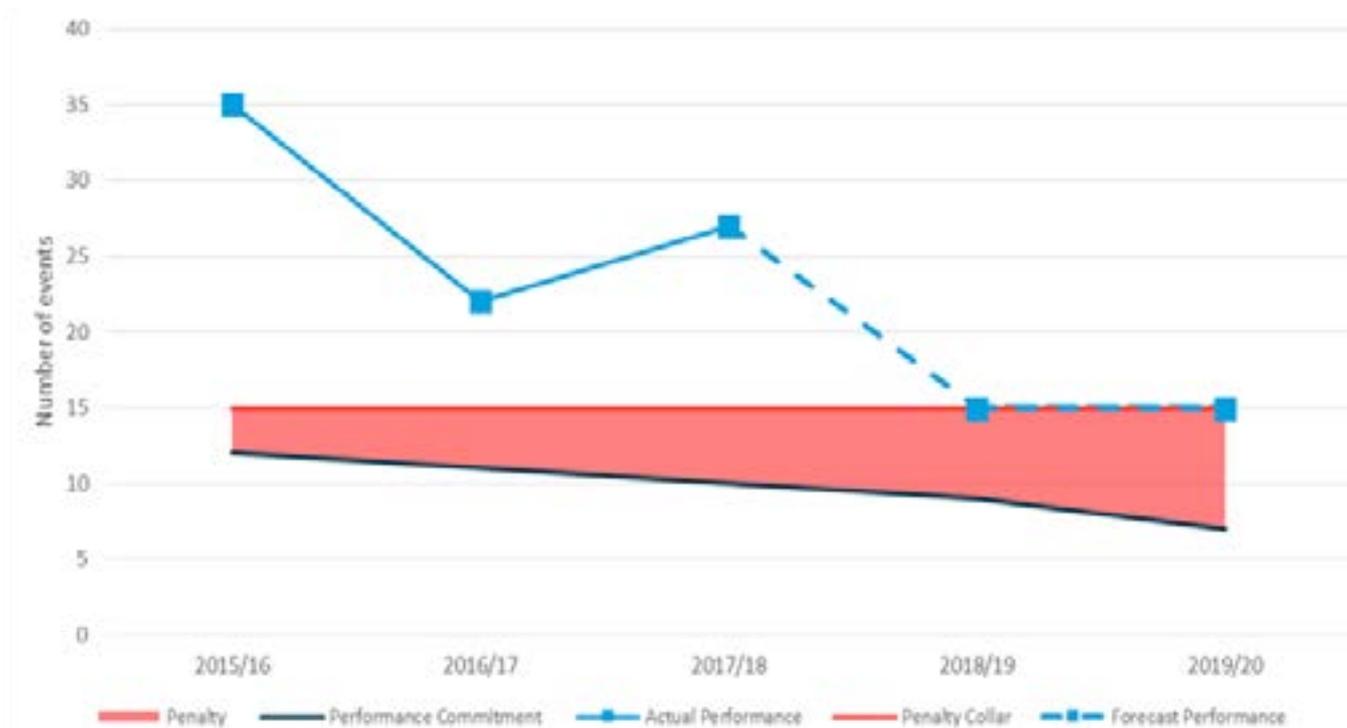
This performance commitment records the number of events with a categorisation of three or above (as defined by the Drinking Water Inspectorate (DWI)). The categories are as follows: category 3 (significant), category 4 (major) and category 5 (serious).

This measure is penalty only, therefore if we out perform on our performance commitment no out performance payments will be earned (only reputational benefit) but if we under perform then a penalty will be incurred.

Actual and forecast performance for the 'Water Quality Events DWI Category 3 or above' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	12	11	10	9	7
Actual/Forecast	35	22	27	15	15
Pass/Fail	Fail	Fail	Fail	Fail	Fail
Out performance payment/ Penalty	£(0.447)m	£(0.596)m	£(0.745)m	£(0.894)m	£(1.192)m

Water quality events DWI category 3 or above - AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of Performance

The performance commitment target for 2017/18 has not been achieved. There has been a decrease in the number of process events at our WTW. However there has been an increase in the number of network events in comparison to last year and an increase in single (or multiple) property “do not drink” events.

The root cause of the events in 2017/18 include internal plumbing, contaminated land, back siphonage and inadequate turnover and proximity to the end of the main, which are generally out of management’s control but are still reportable to the DWI.

The number of water quality events associated with customers receiving discoloured water following both planned and unplanned activities on the network has increased. Of the category 3 or above events; 15 were events that included customers receiving discoloured water following both planned and unplanned activities on the network and events caused by contractors working for third parties. Even though the contractors are not working for United Utilities and the events are outside our direct control, we have received either customer contacts or have had to provide advice to our customers. Therefore these events are still reportable to the DWI.

Penalty or Out performance payments

The performance commitment has not been met for 2017/18 resulting in a penalty of £0.745 million this year.

Due to the challenging target that has been set for this measure over the remainder of the AMP there is a risk that further penalty may be incurred in some future years. In order to calculate any penalty the ODI performance is compared against the target performance. If the performance falls within the penalty zone then we multiply the resulting difference by the penalty rate of £0.149 million per event.

Lessons Learnt and Action Plan

We are implementing the following activities to reduce the number of water quality events and bring future performance in line with our performance commitments:

- i. We have delivered a comprehensive action plan to reduce the risk of further incidents by revising our discoloured water risk assessment process for planned work. We have updated the DWI on these actions and have completed classroom training to network operations staff.
- ii. There has been an increase in the scale of our mains cleaning programme targeting water quality zones with the highest number of customer contacts.
- iii. We are implementing ‘start-up to waste’ projects at water treatment works to allow for a more controlled start up following a shut down and therefore avoiding a potential water quality event.
- iv. Programme of work completed to assess critical control points on all WTWs and Service Reservoirs and installation of additional instrumentation and assessment of control philosophies.
- v. Implementation of 24/7 manning at key water treatment works has been put in place.
- vi. We have recruited additional Process Operators to take readings at set intervals from all unmanned sites to provide additional security for water quality compliance and process performance.
- vii We have continued development of algae management plans at all high risk WTWs to reduce the potential for algae to develop with the associated production of geosmin and 2-methylisoborneol (2 MIB). These compounds produce an earthy/musty taste which can be detected by customers.
- viii. Implementation of the Aquavista system provides visibility of the activities the Company is carrying out on the network and the customer contacts received.

Anticipated Performance Years 4 and 5

Despite the additional activities that we are undertaking, the performance commitments are challenging and we anticipate further penalty may be incurred in future years. As such we are predicting a net penalty for this measure of £3.587 million.

This figure is unlikely to move significantly. The risks and opportunities identified in the box below could impact upon reported numbers but are unlikely to materially affect the predicted penalty value.

Future performance - risk, issue, concern, change or opportunity

1. Water Transformation Programme - We are working with the DWI to deliver a comprehensive 'Transformation Programme' with continuous liaison, monthly updates and quarterly meetings. Completion of the transformation programme should result in a significant reduction in the number of water quality events.
2. Changes to regulation and/or guidance by DWI - Changes to regulations could impact on the number of events which become reportable and therefore change the volume of category 3 or above events
3. The number of Regulation 28 Notices and/or Enforcement orders could impact the volume of events - Additional reporting requirements within Regulation 28 notices or enforcement order could lead to an increase in the number of reportable events. Our processes ensure that lessons learnt from previous events are circulated to enable mitigating measures to be put in place and prevent potential reoccurrence.
4. Events caused by Third Parties - Although events caused by Third Parties are outside our control these events are still reportable to the DWI.

Line 3 A3: Water Quality Service Index

Performance Summary

We failed to meet our performance commitment target in this measure in 2017/18, incurring the maximum penalty. Although we anticipate an improvement in our performance for the remaining two years of the AMP, our target is tough and we expect we will remain within the penalty zone.

Measure description

The water quality service index (WQSI) measures performance against six sub measures which each contribute to the overall index score, the sub measures are:

- Water treatment works coliform non-compliance
- Service reservoir integrity index
- Water treatment works turbidity fails
- Mean zonal compliance
- Distribution maintenance index
- Contacts for water quality

Only the 'contacts for water quality' sub measure contributes to both an out performance payments and penalty: the other five water quality sub measures carry a penalty only incentive.

Mean zonal compliance is a particularly important sub measure that measures water quality against 39 water quality standards. To reflect the significance of this measure, from 2017/18 onwards we have a specific penalty incentive for this sub measure, which generates a standalone penalty and acts as a "gateway check" for the overall index.

This means that even if the Water Quality Service index score is above the reward deadband then an out performance payments would only be warranted if performance for the MZC sub measure is also above the MZC penalty deadband (100%).

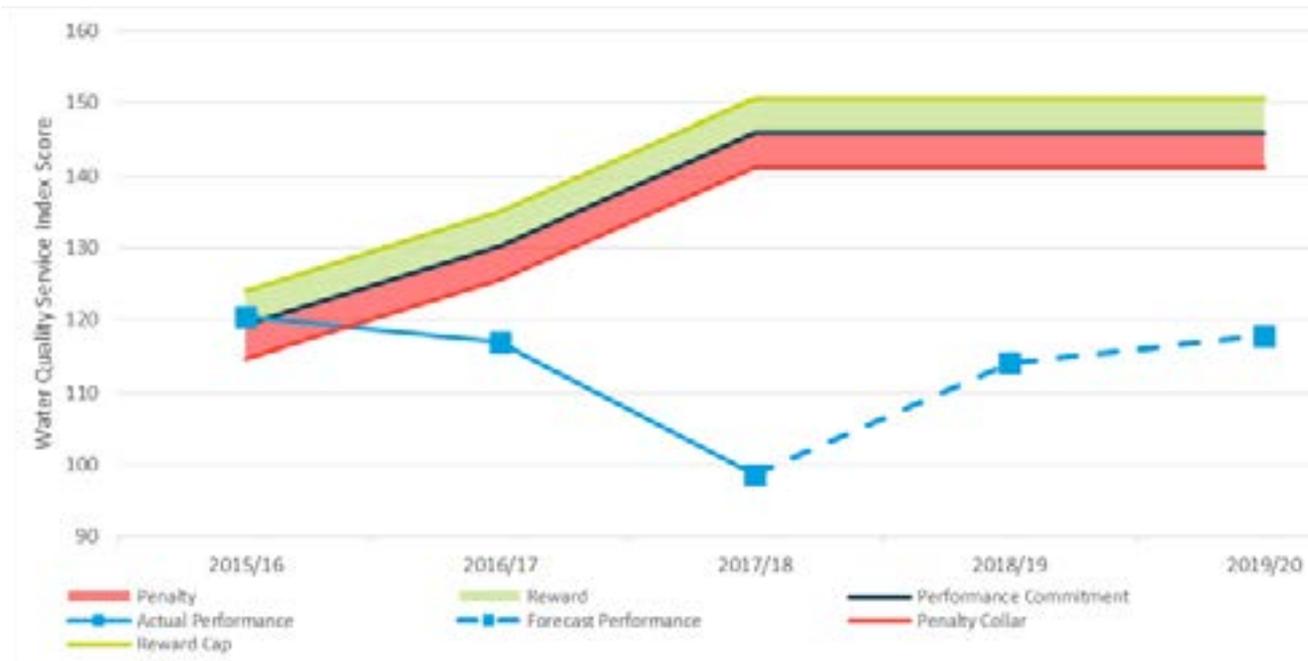
Actual and forecast performance for the 'Water Quality Service Index score' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	119.300	130.300	145.900	145.900	145.900
Actual/Forecast	120.465	116.923	98.645	114.119	117.791
Pass/Fail	Pass	Fail	Fail	Fail	Fail
Out performance payment/ Penalty	£0.227m	£(3.619)m	£(3.619)m	£(3.619)m	£(3.619)m

2107/18 Actual performance and targets for the Water Quality Service Index sub measures

Sub measure	Indicative Target 2017/18	Performance 2017/18	Pass/Fail
WTW coliform non-compliance	0.04%	0.01%	Pass
SR integrity index	99.96%	99.97%	Pass
Index WTW turbidity fails	3 (number)	1 (number)	Pass
Index Mean zonal compliance	100.00%	99.97%	Fail
Distribution maintenance index	99.88%	99.89%	Pass
Contacts for water quality	6,904 (number)	11652 (number)	Fail

Water quality service index score - AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

The company achieved the performance commitment target in 2015/16 earning an out performance payment of £0.227 million. However, the performance commitment was failed in 2016/17 and 2017/18 resulting in the maximum penalty of £3.619 million in both years. Cumulatively this gives a penalty over the first three years of £7.011 million.

WQSI performance has been impacted by the high number of customer contacts for water quality (brown/black/orange and blue/green appearance). There has been an improvement in the number of discoloured water events that are reported to the DWI (discoloured water contacts that are attributed to DWI events are exempt from this measure, they are covered by DWI water quality events category 3 and above). We have worked hard to deal with large events and reduce the risk of large scale discolouration, however, smaller issues on the network are continuing to impact on this measure.

We have continued to receive contacts relating to chlorine, other (metallic etc.) and musty taste and odour throughout the year.

Penalty or Out performance payments

In order to calculate any penalty or out performance payments the actual index score for the year is compared against the target index score. If the overall index score falls within the out performance payments or penalty-zone then the incentive is calculated by multiplying the difference by a penalty rate of £0.770 million per index point or the reward rate of £0.417 million per index point. Details of the calculation of this index measure are set out in Appendix 2

We have out performed four of the six sub measures but we have missed the mean zonal compliance and number of water quality customer contacts target. Mean zonal compliance measures performance against 39 water quality standards. Performance this year improved to 99.97% but the performance commitment increased to 100% compliance. Achieving 100% compliance is challenging, not least due to the influence of customer internal plumbing on several water quality parameters.

Mains cleaning and large diameter mains cleaning projects are currently underway to reduce the risk of discolouration, turbidity, iron and manganese infringements. To further reduce the risk we have committed to undertake mains cleaning in an additional 70 water supply zones.

Discoloured water contacts that are attributed to DWI events are exempt from this measure - they are covered by DWI water quality events category 3 and above. It can be inferred that as we have improved how we manage large events and reduce the risk of large scale discolouration we have increased the number of near misses on the network, which are impacting this measure.

Lessons Learnt and Action Plan

We recognise the challenges faced with this measure and whilst we are predicting to under perform our performance commitment we have a number of activities in place in order to bring future performance back on track:

- We have an extensive mains cleaning programme to deliver a reduction in customer contacts helping us move towards achieving the performance contacts commitment for the final year of AMP6.
- Discoloured water risk assessment training and other operational training packages have been provided for operational staff.
- Continued deployment of turbidity monitors during network operations will improve control of the network and reduce the risk of iron, manganese and turbidity infringements.
- We are currently delivering a number of S19 Undertakings to reduce the risk of discolouration.
- We have a number of Regulation 28 notices for discolouration. As part of these notices, cleaning will be undertaken in order to reduce the risk of discolouration. The start of this work commenced in early 2017. The reduction of blue/green contacts will be facilitated by the optimisation of pressure in the distribution network to prevent against transient depressurisations and back siphonage from internal plumbing fittings. We are writing to manufacturers of carbonated drinks machines to raise awareness of copper pipe work.
- Development of algae management plans is continuing at all high risk water treatment works to reduce the potential for algae to develop with the associated production of geosmin and 2 MIB (compounds from algae degradation cause taste and odour). Algae management plans are now embedded as business as usual with regionally deployable powdered activated carbon dosing rigs available to remove Geosmin and 2MIB if this is detected as part of the enhanced monitoring programme.
- Chlorine “heat maps” for the distribution network have been developed and chlorine reduction strategies have been implemented.

Anticipated performance Years 4 and 5

The performance commitment becomes increasingly challenging for the remainder of the AMP period and the current forecast for the WQSI is that we will under perform and incur penalties against the annual performance commitment for the remainder of the AMP.

Future performance - risk, issue, concern, change or opportunity

1. Factors outside our control - e.g. rainfall, can impact on raw water quality which can then impact on this measure.
2. Climate change could impact on the amount of algal growth.

Line 4 B1: Average minutes supply lost per property (per year)

Performance Summary

We have failed to meet our performance commitment against this measure for 2017/18, but we predict an improvement in performance and anticipate we will meet the target next year and out perform the target in the final year of the AMP.

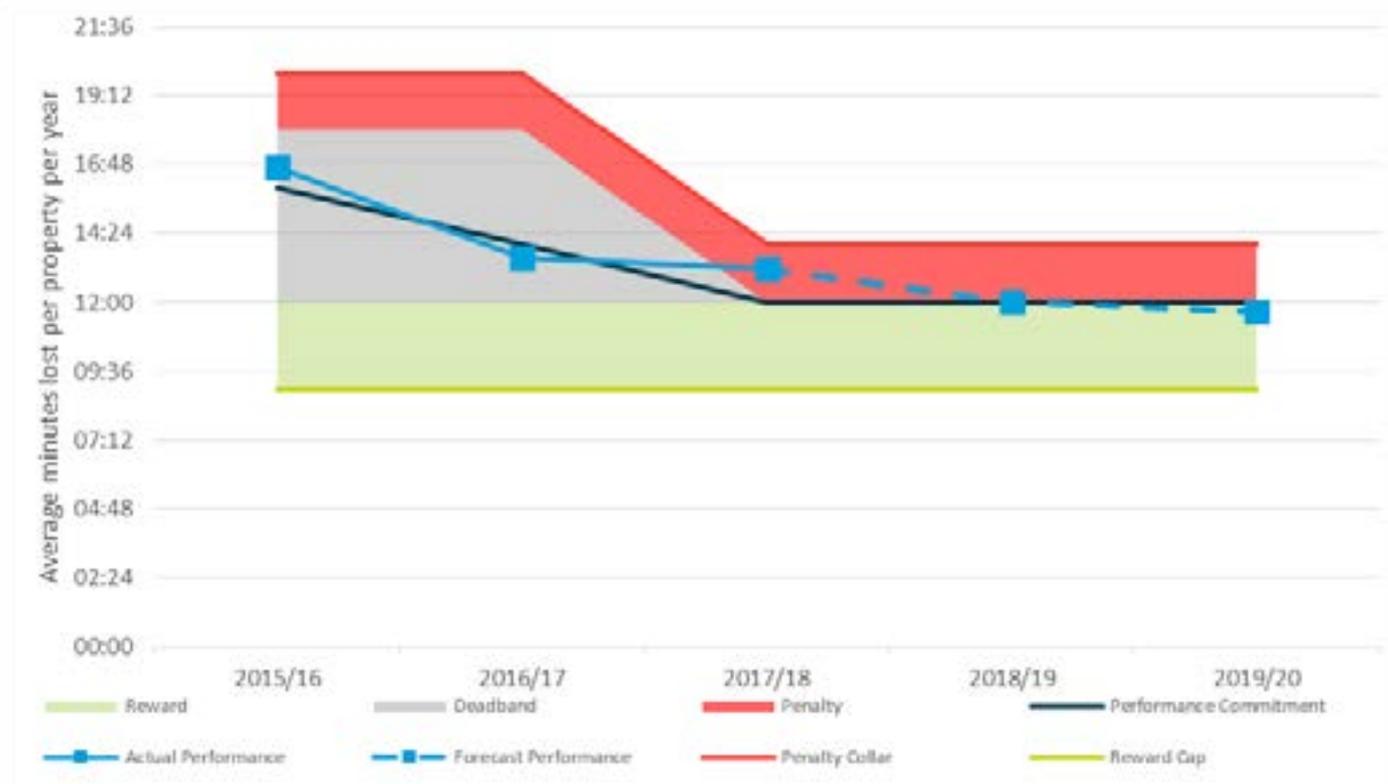
Measure description

This measure records (in minutes) the loss of supply to our customers which continues for greater than three hours whether the event was as a result of planned, unplanned or third party actions. The regulatory targets for this performance commitment are highlighted below.

Actual and forecast performance for the 'Average Minutes Lost' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	16.00	14.00	12.00	12.00	12.00
Actual/Forecast	16:42	13:33	13:09	12:00	11:40
Pass/Fail	Fail	Pass	Fail	Pass	Pass
Out performance payment/ Penalty	£0m	£0m	£(5.962)m	£0m	£1.326m

Actual and forecast performance for the 'Average Minutes Lost' - AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

Performance has improved compared to 2015/16 and 2016/17, but we have failed to meet our target in 2017/18. We have worked hard to improve our response and restoration of supplies. The measure is however significantly impacted by large loss of supply incidents that can cause significant variations in performance. One such event occurred in 2017/18 where a loss of supply event in Lytham in July 2017 equated to 02:27 (mm:ss) per property.

We are seeing an increase in the number of properties impacted by planned interruptions. This is due to a programme of planned activity specifically mains cleaning and non-core projects (diversions / mains laying).

Penalty or Out performance payments

In order to calculate any penalty or out performance payments the ODI performance is compared against the target ODI performance. If the performance falls within the out performance payments or penalty-zone then we multiply the resulting difference by the incentive rate. For average minutes lost the incentive penalty rate is £5.184 million and the out performance payment is £3.978 million per minute lost per property.

Performance against this measure has improved year on year since the start of the AMP6 period. However due to the tightening of the target year three has resulted in a penalty whilst the previous performance fell within the deadbands and therefore no out performance payment or penalty was earned.

Lessons learnt and action plan

Improving performance to meet the reducing targets is in both company and customer interests. This measure covers all interruptions greater than three hours and any improvement in this measure is of direct benefit to customers in terms of a reduction in the amount of time without water, this also has a reputational benefit.

We are making improvements in restoration and repair times which will facilitate a reduction in the average minutes lost measure. Loss of supply events impacting large numbers of properties are difficult to forecast. However a number of initiatives, such as our strategic mains replacements, should lead to long-term improvements in this measure.

Planned expenditure relating to regional pressure optimisation, strategic mains, strategic valves and crossings and replacement of 'poor condition' mains will facilitate long-term improvements in this measure. This should result in a reduction in mains bursts and the facility to isolate and re-zone in the event of a burst. Expenditure on mini alternative supply vehicles and response equipment should have an immediate impact allowing us to meet the reducing target throughout AMP6.

Anticipated performance Years 4 and 5

We are currently forecasting to meet the targets for the rest of the AMP. Performance is expected to continue to improve in line with the reducing targets throughout the AMP. Whilst there is some opportunity for us to out perform and earn out performance payments, this needs to be balanced with the potential impact of large loss of supply events.

Future performance – risk, issue, concern, change or opportunity

1. Failure of a strategic main - where a strategic main cannot be supported by alternative supplies or re-zoned which could lead to a long loss of supply due to potential difficulties with access or repair.
2. Freeze-thaw events - A significant event could create additional leakage breakout which could be challenging to resolve.
3. Long-term changing climate - Increase in severe weather events such as those experienced in December 2015 can have an impact on this measure.

Line 5 B2: Reliable water service index (RWSI)

Performance Summary

Our performance was below target for 2017/18 and we anticipate that we will fail to meet our targets in the final two years of the AMP6 period.

Measure description

This performance commitment is an index which comprises four sub measures, these are:

- Total bursts
- Interruptions >12 hours
- Properties below reference level at end of year (DG2)
- Unwanted customer contacts for water availability

The size of any penalty associated with the reliable water service index (RWSI) is determined by the under performance of all four sub measures. The size of any out performance payments is based upon the out performance of the customer service measures: customer contacts, poor pressure and interruptions greater than 12 hours. The asset health (total bursts) sub measure does not contribute to the out performance payments.

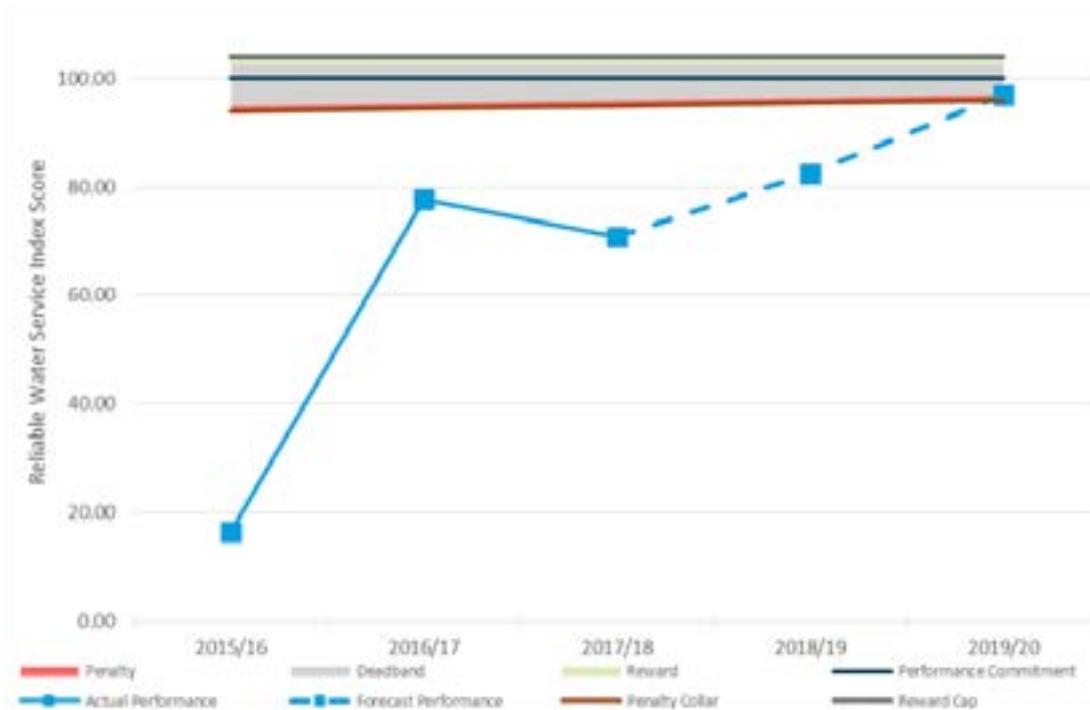
Actual and forecast performance for the 'Reliable Water Service Index' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	100.000	100.000	100.000	100.000	100.000
Actual/Forecast	16.447	77.840	70.827	82.563	97.043
Pass/Fail	Fail	Fail	Fail	Fail	Pass
Out performance payment/ Penalty	£(7.974)m	£(7.974)m	£(7.974)m	£(7.974)m	£0m

2107/18 Actual performance and targets for the Reliable Water Service Index sub measures

Sub measure	Indicative Target 2017/18	Performance 2017/18	Pass/Fail
Total bursts	5080	4484	Pass
Interruptions > 12 hours	730	4631	Fail
Properties below reference level at end of year (DG2)	272	278	Fail
Unwanted customer contacts for water availability	48000	46487	Pass

Actual and forecast performance for the 'Reliable Water Service index' - AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

We met two out of the four sub measure targets for the number of mains bursts and customer contacts about water availability but we failed to meet the target for the following two sub measures:

- Interruptions to supply greater than 12 hours sub measure.
- Properties on the poor property register.

We have reduced the number of interruptions to supply greater than 12 hours compared with the previous year however there was a large incident in Lytham in July 2017 that affected nearly 3,000 customers for greater than 12 hours that significantly impacted performance.

Low pressure performance marginally failed to meet the 2017/18 target. The increase is predominantly due to better analysis and control of our process. Properties suffering low pressure for a period of greater than four weeks are added to the low pressure register until it can be demonstrated that the property is receiving pressure at or above the standard. We remove properties from the low pressure register throughout the year following investigations and work such as service/repair to pressure management valves or mains laying/pumping schemes should also help this measure.

Penalty or Out performance payments

In order to calculate any penalty or out performance payments the annual index performance is compared against the target index performance. If the performance falls within the out performance payments or penalty-zone then we multiply the resulting difference by the incentive rate. The Reliable Water Service Index (RWSI) incentive penalty rate is £7.974 million and the out performance payments is £5.970 million per index point. Details of the calculation of this index measure are set out in Appendix 2.

For 2015/16, 2016/17 and 2017/18 the RWSI target was not achieved due to poor performance in one sub measure 'Interruptions greater than 12 hours'. As such, we did not meet our performance commitment for years 1, 2 or 3 and a maximum penalty of £7.974 million was incurred in each year. Performance in the two sub measures 'Total bursts' and 'unwanted customer contacts for water availability' are ahead of target.

Lessons learnt and action plan

There are a number of actions/initiatives in place that should deliver long-term improvements to this measure both in the remainder of this AMP and into the future, these include:

- Planned expenditure relating to regional pressure optimisation, strategic mains, strategic valves and crossings and replacement of 'poor condition' mains will facilitate long-term improvements through a reduction in mains bursts, this will also be supported by an increase in network knowledge and the facility to isolate and re-zone in the event of a burst.
- The introduction of mini alternative supply vehicles and interruption response equipment (including overland supply vehicles) will support the restoration of supplies during events.
- Reducing the number of properties on the low pressure register through improving the pressure experienced by customers.

Anticipated performance Years 4 and 5

Performance against this measure is greatly influenced by major loss of supply incidents. Performance in the sub measure 'Interruptions greater than 12 hours' can be variable based on incident performance. We have plans in place to improve performance particularly due to investment in Alternative Supply Vehicles, whilst we recognise the tight performance commitment and therefore are anticipating further penalties, we are aiming to meet the target in the final year of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. Failure of a strategic main - where a strategic main cannot be supported by alternative supplies or re-zoned which could lead to a long loss of supply due to potential difficulties with access or repair.
2. Freeze-thaw events - A significant event could create additional leakage breakout which could be challenging to resolve.
3. DG2 properties - Risk of identifying additional properties that need to be added to the register particularly where they are single properties and the only solution is to install a booster pump which can be cost prohibitive.

Line 6 B3: Security of supply index (SoSI)

Performance Summary

We have met our performance commitment for 2017/18 and anticipate that we will continue to do so for the remaining two years of the AMP6 period.

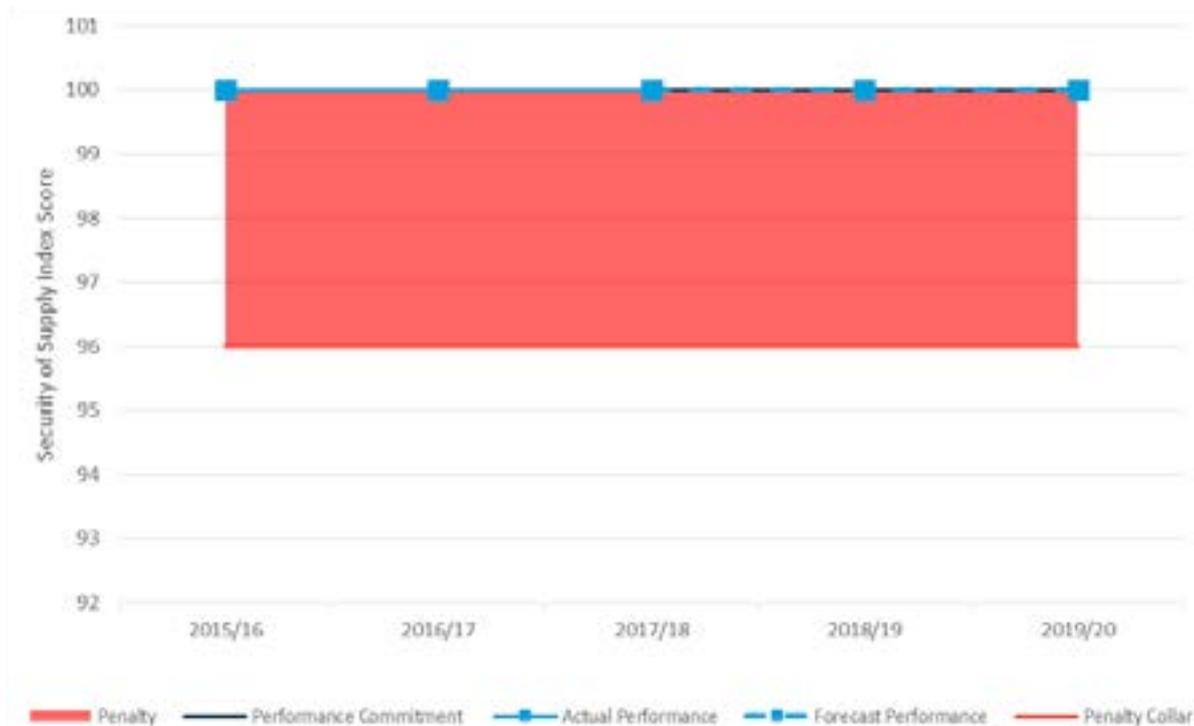
Measure description

The security of supply index (SOSI) measures our success in meeting the region's demand for water. The aim is to ensure a zero or positive supply-demand balance (no deficit) at all times throughout the planning horizon - from the current year through to 2040. The index is expressed out of 100 and the measure is penalty only, meaning that if a SOSI score of less than 100 is achieved then a penalty will be incurred.

Actual and forecast performance for the 'Security of supply' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	100.00	100.00	100.00	100.00	100.00
Actual/Forecast	100.00	100.00	100.00	100.00	100.00
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0m	£0m	£0m	£0m	£0m

Security of Supply Index



Overview of performance to date

We have continued to focus on our supply demand balance across all our resource zones. Our methodologies are consistent with those used for the Water Resource Management Plan and performance to date has been good for this measure.

The performance commitment for 2015/16, 2016/17 and 2017/18 has been met however there is still a need to monitor this measure closely and take action where required, especially considering the fine supply-demand balance in our Cumbrian Resource Zones.

Penalty or Out performance payments

Security of supply index is a penalty only measure. To calculate any penalty the actual performance level is compared against the target performance level. If the performance falls within the penalty-zone then we multiply the resulting difference by the penalty incentive rate of £3.30 million per index point.

As our performance target has been met for 2017/18, we have not received a penalty.

Lessons learnt and action plan

To mitigate any risk to SoSI in future years, we are taking action to reduce the demand for water and have also improved supply side assets which will increase the water available for use.

Anticipated performance Years 4 and 5

Our target for the remainder of AMP6 is to maintain a SOSI score of 100.000. This is consistent with the aim to ensure a zero or positive supply-demand balance (no deficit) at all times from the current year through to 2040. Failing to meet the target level not only has incentive implications, but could also result in intervention by Defra if our water resources security of supply obligations are not met.

We do not anticipate any penalties during the AMP6 period, we are continuing to focus on demand management and are seeing improvements in leakage performance through the AMP6 period to date.

Future performance- risk, issue, concern, change or opportunity

1. Dry weather and revisions to the company Drought Plan - Outages and asset capability are continually under review, there is the potential that this could have an impact on SOSI in future years.
2. The supply-demand balance is maintained in the WRMP based on this demand reduction, which is consistent with historic trends and forecast trends in demand across the region. In the event that these demand reductions are not realised, there remains an increased risk to the supply-demand balance.

Line 7 B4: Total leakage at or below target

Performance Summary

We have out performed our performance commitment in 2017/18 and expect we will continue to do so for the remainder of the AMP.

Measure description

This measure records the volume of water leaking from our network as a deviation from our overall target of 462.65MI/d. The performance commitment has both out performance payments and penalty financial incentives.

Actual and forecast performance for the ‘Total leakage at or below target’ performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	0.0	0.0	0.0	0.0	0.0
Actual/Forecast	10.8	23.4	9.1	13.4	13.4
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0m	£9.148m	£0m	£1.646m	1.646

Actual and forecast performance for the ‘Total leakage at or below target’ - AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

The performance commitment for 2015/16, 2016/17 and 2017/18 was met. Recognising the importance customers place on leakage, additional investment has been used to fund more leakage detection teams and repair gangs. We have also accelerated our pressure management programme in order ensure delivery of our targets. At the start of the AMP leakage performance has also benefitted from mild winters which have helped to deliver a favourable leakage position.

Penalty or Out performance payments

In order to calculate any penalty or out performance payments the actual performance level is compared against the target performance level. If the performance falls within the out performance payments or penalty-zone then we multiply the resulting difference by the incentive rate. For leakage, the incentive penalty rate is £1.458 million per MI/day variance and the out performance payments is £0.748 million per MI/day variance.

In 2017/18 we out performed our target but not enough to receive an out performance payment.

Lessons learnt and action plan

Our current leakage levels are significantly below the economic level of leakage, which has been calculated at 682.9 MI/d. This suggests that leakage reductions may not be economically beneficial. We are already performing below the sustainable economic level of leakage required to maintain the supply demand balance. However we recognise the importance that our customers place on reducing leakage and are therefore continuing to strive for improvements.

We reported our best ever performance in 2016/17. The severe weather and freeze thaw experienced in February 2018 has caused an increase in leakage compared with last year but the plans we have in place meant we were still able to out perform our target although not by enough to earn an out performance payments. We need to continue to manage all activities that drive the leakage calculation in order to continue to out perform targets in this area in future.

Anticipated performance Years 4 and 5

Our prediction for leakage performance is that we will be able to out perform our 2015/16 leakage level of 462.65 MI/d and meet our performance commitment target of 0 MI/d deviation from target. With the plans we have in place and assuming that there isn't any significant impact from severe winters we hope to be able to earn an out performance payments on this measure over the remainder of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. Non-domestic consumption - From FY18 it will be necessary to closely monitor the quality and accuracy of data provided by the Market Operator to ensure any inaccurate meter readings are promptly corrected by the retailers and robust data is available for use in the non-household consumption element of the leakage calculation. Any issues with obtaining data from the Market Operator could have an impact on our leakage calculation.
2. Freeze-thaw events - Additional leaks/ bursts as a specific result of freeze-thaw events could be challenging to resolve.

Line 8 B5: Resilience of impounding reservoirs

Performance Summary

We have out performed our target on this measure in 2017/18. We anticipate that we will meet our target in both of the next two years.

Measure description

The measure relates to our duty to maintain our statutory reservoirs and represents the resilience of these reservoirs using a total score from risk assessments.

The scores are calculated using current international best practice and in compliance with Health and Safety Executive guidelines.

The measure is based upon a starting performance score of 151.86, with work undertaken to reduce risk levels increasing the performance score. The higher the performance score the greater the reduction in risk and therefore the better the performance. So the target is to be at or above the performance target in each year of the period.

Actual and forecast performance for the 'Resilience of impounding reservoirs' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	161.2	163.21	164.44	164.87	165.27
Actual/Forecast	161.61	164.25	165.42	165.09	165.37
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0m	£0m	£0m	£0m	£0m

Actual and forecast performance for the 'Resilience of impounding reservoirs' - AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

This measure involves a rolling score starting from the base level in 2013/14 through the end of the AMP5 period and across the AMP6 period. Therefore out performance in one year can benefit the subsequent year. As such, the out performance in FY16 has enabled continued out performance in FY17 and FY18.

There was a slight out performance of the target in 2015/16 due to early completion of key projects, implementation of operational solutions, and the reduction in cumulative risk following the completion of site surveys and analysis by the Risk Estimation Team (this includes members of our Reservoir Safety Team and independent, government appointed, Panel Engineers). It is in customers' interests to implement these no-build operational solutions immediately as they lower risk at no major cost. Our performance to date has been as a result of the delivery of the schemes set out below.

Full details of these schemes are available in the document "PR14 reconciliation", which is published on our website and available via the following [link](#).

Penalty or Out performance payments

In order to calculate any penalty for this measure, the actual performance is compared against the target performance. If the performance falls within the penalty-zone then we multiply the resulting difference by the incentive rate. For impounding reservoirs, the incentive penalty rate is £0.250 million per risk unit.

We out performed against our performance commitment in 2015/16 which enabled continued out performance in 2016/17 and 2017/18. The measure is a penalty only measure and therefore no out performance payment has been accrued.

Lessons learnt and action plan

The resilience of impounding reservoirs programme is entirely focused on securing the safe, efficient, long term future of our reservoir assets. These assets are likely to increase in their utility and value to the company, as opportunities develop for water trading.

Securing the long term future of reservoir assets will also help to ease the transition of our water storage assets to any future water resources company that may emerge as part of future market reform.

Out performance is forecast for the remainder of AMP6 for the following reasons:

- The resilience of impounding reservoirs programme is currently ahead of the minimum delivery schedule.
- The programme has delivered positive risk reduction benefit for customers in the early years of the AMP.
- The programme has achieved some early success, with slight out performance against the target, this will help to offset any future slippage in projects if challenges arise later in the AMP.

The 'resilience of impounding reservoirs programme' delivers both civil engineering and operational solutions in order to reduce the risk of dam failure. In order to continue delivering against this measure we are exploring alternative, operational measures which may be available to reduce risk such as lowering of water levels, or increased inspection frequency.

Anticipated performance Years 4 and 5

A slight out performance against the performance commitment target is forecast for future years. Out performance early in the AMP benefits future years as this is a cumulative performance commitment and therefore out performance assists with meeting the future years' targets.

There are no penalties anticipated for this measure. However the programme has a number of challenging projects to deliver before the end of the AMP, and therefore any delivery issues that arise could result in a failure to achieve our performance commitment.

Future performance – risk, issue, concern, change or opportunity

1. Project Delivery Timescales - The majority of projects undertaken in the resilience of impounding reservoirs programme are major capital projects. Major engineering projects can often have long lead-in times. If project delivery is delayed there is a danger that projects may slip into subsequent financial years, placing the annual performance commitment targets at risk.
2. Unscheduled projects - The resilience of impounding reservoir programme was developed with a focus on dam safety only. Increasingly we are starting to operate reservoirs in new ways, to offer flood mitigation, environmental protection, raw water quality improvements, floating solar power generation, and unscheduled safety interventions delivered for a variety of customer and stakeholder reasons. We will need to manage and balance risk in these areas to ensure that transferring expenditure has minimal impact on our ability to deliver our original programme of work.

Line 9 B6: Thirlmere transfer into West Cumbria

Performance Summary

We have made very good progress on the delivery of this scheme and now significantly ahead of the originally planned schedule for the project.

Our plans also show that we should be able to complete the project approximately one year ahead of the originally planned date, although there are inevitably risks associated with any project of this scale and complexity.

Measure description

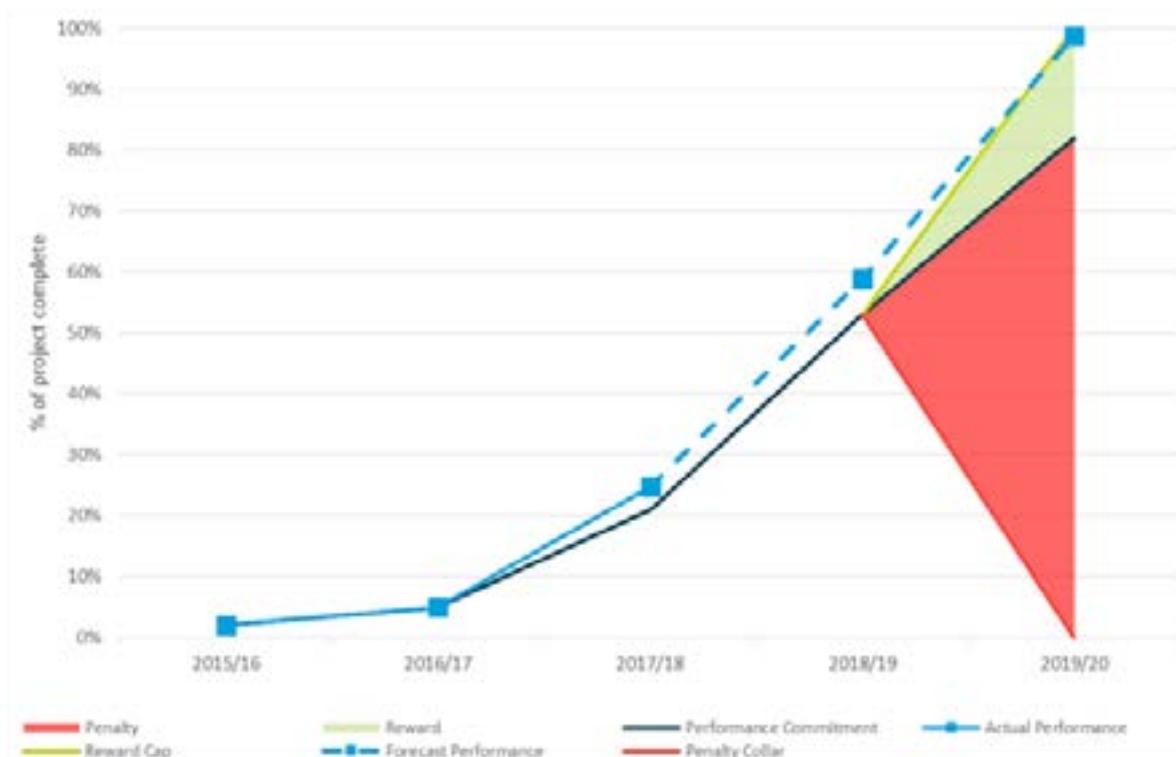
This performance commitment measures the progress of our major project to provide an additional water supply from Thirlmere reservoir to our West Cumbria supply zone. As the project will be completed in the AMP7 period, the PC tracks the earned value of the project with an end of AMP6 target of 82% delivery.

Details of our plans for West Cumbria can be found on our website. The breakdown of the project stages that make up the performance commitment in both AMP6 and AMP7, and the percentage allocated to each year as shown below.

Actual and forecast performance for the 'Thirlmere transfer' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	2	5	21	53	82
Actual/Forecast	2	5	25	57	99
Pass/Fail	On track	On track	On track	On track	Out performed
Out performance payment/ Penalty	-	-	-	-	£21.226m

Actual and forecast performance for the 'Thirlmere transfer into West Cumbria' performance commitment



Overview of performance to date

Milestone	Planned delivery year	Actual delivery year	Earned value (%)	Early / late
Tender documents (scope book) submitted to bidders	FY16	FY16	1.00	On time
Planning application submitted	FY16	FY16	1.00	On time
Contract awarded	FY17	FY17	1.50	On time
Planning application approved	FY17	FY17	1.50	On time
Construction started on site	FY18	FY18	7.66	On time
First 23.12% of main in the ground	FY18	FY18	8.34	On time
Thirlmere Bridge End connection works complete	FY20	FY18	3.68	Early

Our commercial strategy of splitting the project into five contracts and the setting up of a dedicated commercial team has enabled the project team to achieve the required contract awards in 2016/17.

We have also set up a planning performance agreement with various authorities and carried out extensive stakeholder management to ensure successful achievement of the planning approved milestone.

In 2015/2016 we achieved the two milestones of 'tenders issued' and 'planning application submitted'. This amounted to 2% of project completion in line with the performance commitment target. In 2016/2017 we achieved the two milestones of 'contracts awarded' and 'planning application approved'.

In 2017/18 we delivered the two planned milestones of 'construction started on site' and 'first 23.12% of main in the ground'. We also delivered the milestone of 'Thirlmere Bridge End construction works complete'. This work delivered a total earned value for the three years to date of 24.68%, which is ahead of the of project completion in line with the performance commitment target of 21%.

Anticipated performance Years 4 and 5

We are planning to deliver this project as soon as possible.

We are planning to deliver the three milestones required in 2018/19, with the substructures of the Water Treatment Works (WTW) and service reservoirs being completed and the next 27.27% of main being laid. We are also planning to complete the superstructure of the WTW earlier than originally planned. This would take the total earned value up to 58.86%.

We now expect to be able to lay the remainder of the transfer main during 2019/20, which was originally due for completion in FY22. This would take the total earned value of the project by the end of the AMP6 period up to 98.70% and only leave the work to complete the service reservoirs and water treatment works remaining to be completed in AMP7.

Subject to potential construction delays we would hope to be able to complete the service reservoirs in late summer of 2020 and complete the WTW and complete the project towards the end of 2020/21.

Penalty or Out performance payments

Penalty and out performance payment incentives for this measure are only applicable in FY20 and not before.

In order to calculate if any out performance payment has been incurred the actual performance is compared against the target performance level.

If the performance falls within the out performance payment zone then we multiply the resulting difference by the incentive rate. For the Thirlmere transfer into West Cumbria the incentive rate is £1.271 million per percent project completion.

By the end of the AMP6 period we are planning to have completed 98.70% of the project in terms of earned value milestones.

This is an out performance of 16.7% (98.7-82)

The out performance payment is equal to the out performance multiplied by the reward rate of £1.271 million/earned value %.

End of AMP incentive = 16.7% x £1.271 million/% = £21.2257 million

Lessons learnt and action plan

The project is on track to out perform the targets as outlined in the performance commitment for the Thirlmere Transfer ensuring we deliver the environmental benefits from the project earlier than originally planned and avoid any financial penalties for under performance.

Future performance – risk, issue, concern, change or opportunity

1. Weather - Drought/excessive rain could slow delivery of the project.
2. Geotechnical tunnelling difficulties - This could result in delays to the scheme.
3. Environmental and archaeological discoveries - Should these be discovered it could potentially slow delivery of the project.

Line 10 C1: Contribution to rivers improved - water programme (NEP schemes and abstraction changes at four Abstraction Incentive Mechanism (AIM) sites)

Performance Summary

We have out performed our target on this measure in 2017/18 through the early delivery of National Environment Programme (NEP) schemes and out performance of the AIM. We anticipate that we will meet our target in both of the next two years.

Measure description

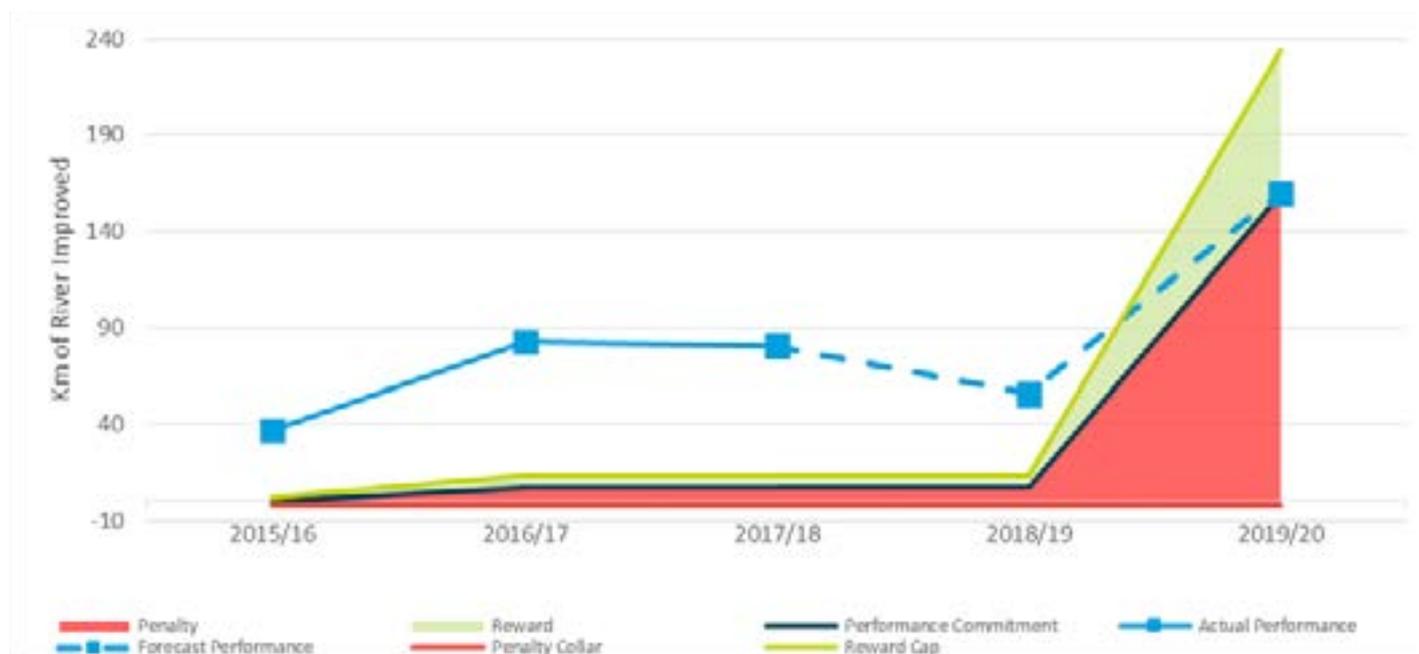
The contribution to rivers improved (water) measure of success is delivered through two main programmes:

- The delivery of an agreed number of kilometres of river improvement through completion of schemes agreed with the EA in the (NEP)
- Additional kilometres improved through changing United Utilities abstraction at the four abstraction incentive mechanism (AIM) sites.

Actual and forecast performance for the ‘contribution to rivers improved’ performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	0	6.6	6.6	6.6	159.5
Actual/Forecast	36.9	82.6	80.6	55.7	160.3
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment /Penalty	£0.0560m	£0.1848m	£0.1848m	£0.1848m	£0.0227m

Actual and forecast performance for the ‘contribution to rivers improved’ performance commitment



Contribution to rivers improved sub measures

Sub measure	Performance 2017/18	Target 2017/18
Cumulative length of river improved by NEP (km)	45.73	
Length of river improved by AIM (km)	34.83	
Total cumulative length of river improved (km)	80.56	6.6

Overview of performance to date

In order to calculate any penalty or out performance payments the actual performance level is compared against the target performance level. If the performance falls within the out performance payments or penalty-zone then we multiply the resulting difference by the relevant incentive rate. For contribution to rivers improved, the penalty incentive rate is £0.111 million and £0.028 million for the out performance payments per km.

We have out performed the performance commitments for 2017/18 resulting in an out performance payments of £0.185 million this year. The calculation of the river length used in the annual assessment is based upon two factors: a) the total length of river affected and b) the actual level of abstraction below the 'Low' river flow threshold compared to the 2007-2013 average annual abstraction below the 'Low' river flow threshold.

This out performance has been achieved as set out below.

- In 2015/16 we secured 0.01 km of river improved through early delivery of the Heltondale fish migration investigation (6UUWR0045); ahead of the 31 March 2017 regulatory target date.
- In 2016/17 we secured 45.70 km of river improved through:
 - 6.55 km from Swindale (6UUWR0031)
 - 39.15 km from seven sediment management plans (6UUWR0009/10/13/15/16/17/20/22/26)
 - 0 km from Thirlmere tributary investigation (6UUWR0042)
- In 2017/18 we secured 0.02 km of river improved through early delivery of the Haweswater investigation into the impact of aqueduct interception of Mossy Beck-Naddle-Tailbert tributaries (6UUWR0036, 6UUWR0038 and 6UUWR0040).

As NEP km river improved is a cumulative measure, the total 2017/18 performance was 45.73 km (= 0.02 km from 2017/18 + 45.70 km from 2016/17 + 0.01 km from 2015/16).

In 2016/17 AIM was added as a specific pro forma table within the Annual Performance Report (Table 3C see Section 2.5). We had already adopted AIM through the PR14 process as part of the contribution to the rivers improved measure. Our measure is calculated differently from the new Ofwat measure, which was developed in consultation with the AIM taskforce of which UUW is a member. The calculation of the river length used in this measure is based upon two factors: a) the total length of river affected and b) the actual level of abstraction below the 'Low' river flow threshold compared to the 2007-2013 average annual abstraction below the 'Low' river flow threshold.

If abstraction in any year is at historic average levels for each site then no river length is added to, or removed from, the reported rivers improved value for that year. If no abstraction is made in that year, then the full river length for that site would be added. If abstraction is at half the average value 50% of the river length would be added. Similarly if abstraction is at 150% of the average 50% of the river length would be removed from the reported rivers improved value for that year. For each AIM site the adjustment cannot be greater than the river length associated with that site.

In 2017/18 for AIM we achieved a performance of 34.83 km. We did not achieve the full 36.84 km as river flows at Ennerdale breached the AIM trigger on nine days. The length of river improved by the AIM sub measure is combined with the cumulative length of river improved through delivery of the NEP programme to give an overall improvement in

river length of 82.55km, out performing the target of 6.6km.

This level of performance results in a small out performance of our overall AMP6 ODI target

Penalty or Out performance payments

In order to calculate any penalty or out performance payment the actual performance level is compared against the target performance level. If the performance falls within the out performance payment or penalty-zone then we multiply the resulting difference by the incentive rate. For contribution to rivers improved, the incentive penalty rate is £0.111 million per km/year variance and the out performance payments is £0.028 million per km/year variance.

In 2017/18 we out performed our target and received an out performance payments of £0.1848 million.

Lessons learnt and action plan

The project is on track to out perform the targets as outlined in the performance commitment for contribution to rivers improved ensuring we avoid any financial penalties for under performance.

Anticipated performance Years 4 and 5

The ODI targets in our 2015-2020 business plan to Ofwat were based on NEP3 issued by the EA on 29 August 2013. Development of the NEP by the EA is a phased process and the final version (NEP5) was published in January 2016. Despite this, the regulatory agreement (and the ODI performance commitment) with Ofwat still stands as per NEP3. NEP5 did not include the three schemes listed below:

- Eel passage on the north bank of River Lune at Forge weir – this has been provided by a third party (Lune Hydro) (1.54 km)
- Implement a new prescribed flow and fish passage at our Old Water river intake on the River Gelt, Carlisle – following a challenge by UU, this was excluded from NEP5 on the grounds of disproportionate cost (0.74 km)
- Implement a higher prescribed flow on the River Ellen – following a challenge by UU, this was excluded from NEP5 on the grounds of disproportionate cost as we plan to cease abstraction from this source in 2022 as part of the Thirlmere link scheme to supply West Cumbria (1.43 km)

If we experience periods of dry weather resulting in low river flows we may perform poorly against the AIM targets. This is mitigated in some way as there is a penalty cap of -2 km against this aspect. For three of the four AIM sites (Ennerdale, Aughtertree Springs and Old Water) the alternative sources of supply are limited. The AIM site with most flexibility in terms of alternative sources is the River Calder at Barnacre. Our Production Planning team keep closely monitors river flow conditions and plan to reduce abstraction at this site if river flows approach the low AIM threshold flow.

Future performance – risk, issue, concern, change or opportunity

1. Weather - Drought/excessive rain could slow delivery of NEP schemes.
2. Dry weather - If we experience periods of dry weather resulting in low river flows we may perform poorly against the AIM targets
3. Environmental and archaeological discoveries

Line 11 D1: Delivering our commitments to developers, local authorities and highway authorities

Performance summary

We have out performed our performance commitment for this measure in 2017/18 and plan to out perform the performance commitments for the remaining years of the AMP.

Measure description

This measure tracks the timeliness of responses to quotation requests by developers and self-lay organisations, and the completion of works for new connections, diversions and requisitions (that is, new pipe installations) within given timescales.

Across each of the KPIs, the percentage of responses delivered and work completed to the company's service levels are monitored. The percentage compliance for the two key areas of activity (timeliness and completions) are then consolidated into a single performance measure shown as a percentage.

Actual and forecast performance for the 'delivering our commitments to developers, local authorities and highway authorities' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	91%	92%	93%	94%	95%
Actual/Forecast	95%	98%	94%	94%	95%
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	Reputational	Reputational	Reputational	Reputational	Reputational

Overview of performance to date

Although year on year performance has reduced we have out performed our performance commitment in 2017/18 with the overall percentage compliance of 93.83%. Implementation of IT systems and new working procedures saw an overall improvement in service in 2016/17. Unfortunately however performance in 2017/18 has been impacted by operational resource issues which has meant responses in some areas have been delayed.

Penalty or Out performance payments

This is a reputational measure with no financial incentive.

Lessons Learnt and Action Plan

We strive to achieve 100% compliance, but due to the nature of the work and other outside influences this is difficult to achieve. We continue to encourage close working between departments and with Local Authorities to ensure work is completed in a timely manner.

Anticipated Performance Years 4 and 5

This was a new measure for AMP6 that we highlighted would be further developed during the AMP. Following agreement of the performance commitments with Ofwat, Water UK introduced a new developer services scorecard with targets tougher than the original performance commitments agreed with Ofwat. We are aiming to out perform the original Ofwat performance commitments and deliver a better standard of service.

Future performance – risk, issue, concern, change or opportunity

Potential programme delays caused by traffic management requirements.

Line 12 E1: Number of free water meters installed

Performance summary

We have under performed this measure for a third year and expect to miss the target for the remaining two years of the AMP.

Measure description

This measure relates to the number of water meters that we install for free. Domestic customers can apply to have a water meter fitted free of charge. This scheme applies to customers who are charged on a Rateable Value (RV) tariff and wish to benefit from a lower bill. The measure is delivered as a result of the underlying base level of demand and through two types of specific intervention:

- The targeted promotion of free water meters to customers to help manage debt issues.
- The installation of free water meters to support operational process and policy improvements.

Actual and forecast performance for the 'Number of free meters installed' performance commitment

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	61,644	59,325	57,393	47,421	46,054
Actual/Forecast	27,197	32,447	36,615	37,414	37,205
Pass/Fail	Fail	Fail	Fail	Fail	Fail
Reward/Penalty	Reputational	Reputational	Reputational	Reputational	Reputational

Overview of performance to date

We have ended 2017/18 delivering a 35% growth in applications for free meters from our customers in the North West, compared to the annual take-up figures when we launched our current five-year business plan in 2015. This year alone we have fitted 36,615 free meters into homes against an original target of 57,393, which was based on an econometric model which we now believe overestimated the likely take-up levels from among our customer base.

To recover this position, we have reinvigorated our metering proposition and made more effective use of customer segmentation to target, promote and message free meter take-up to the customers we know would benefit the most. We have introduced a range of interventions, including a new bill for non-metered customers which provides more relevant and specific information about how the switch to a meter could save them money.

At the time the bill was sent to customers, we held 31 pop-up shops in shopping centres in key locations across the North West to talk openly to customers about the benefits of switching to a meter and to actively dispel the commonly held myths about metering versus a fixed charge.

Recognising that amongst those that would benefit the most are those already struggling to pay or behind with their bills, we built the metering promotion and sign-up into our Town Action Plan, which sees us carry out door-to-door visits to customers in our most deprived towns, completing more than 40,000 visits in the year.

Penalty or Out performance payments

This is a reputational measure with no financial incentive.

Lessons Learnt and Action Plan

Metering levels in the current investment period have significantly increased on previous levels of metering. These estimates were primarily based upon volumes predicted by an independent econometric model, with some additional

uplifts in numbers anticipated as a result of promoting free meters to customers who were in debt, along with undertaking additional work within customers' homes to minimise the number of instances where a meter could not be fitted.

As set out in previous years' reports, the initial econometric model predictions overestimated uptake levels. To address this we have engaged an alternative consultant to create a revised model, more accurately able to predict future uptake levels. Within those original targets, uptake levels have not been as high as anticipated. Similarly, we have responded to customer feedback about the internal fitting of meters, which has generated less opportunities to do additional work to facilitate internal meter installations than assumed.

Although we have not achieved the target for the year, we are encouraged by the significant growth in year and the early positive results of some of our newer metering campaigns. We will continue to focus on increasing uptake levels by promoting meters to customers we believe would benefit from a meter, which will be enhanced by the implementation of more sophisticated customer segmentation built into our billing system in 2018/19. We are optimistic that the combination of the enhanced proposition and more effective targeting will generate further growth in free meter take-up among customers in remaining years of this investment period.

Anticipated Performance Years 4 and 5

We do not expect to meet the targets for the remaining two years of the AMP but do expect to maintain higher levels of replacement that we have historically.

Future performance – risk, issue, concern, change or opportunity

1. There is a risk that our planned metering campaign and promotion activity does not deliver the estimated uptake of free meters for the remaining two years.

1.1 b) Wastewater Service performance commitments

2017/18 Annual performance summary

Performance against our water service outcomes in 2017/18 and the cumulative performance in the AMP6 period to date, is set out in the table below. Further information on each measure is provided within this section of our Annual Performance Report, with details of the calculation of the index scores and associated incentives provided in Appendix 2.

Wastewater Service Operational Performance Summary (2017/18)

Performance commitment	Actual			Performance Commitments		Incentive		
	2015/16	2016/17	2017/18	2017/18	Pass / Fail	Impact	2017/18 Annual (£m)	2017/18 Cumulative (£m)
S-A1: Private sewers service index	91.69	91.90	85.00	<=100	Pass	Reward	7.376	22.128
S-A2: Wastewater network performance index	90.95	89.47	86.17	<=99.4	Pass	Penalty	0.000	0.000
S-B1: Future flood risk	16,472	16,418	16,395	<=16,341	Fail	Reputational	N/A	N/A
S-B2: Sewer flooding index	100.8	94.4	70.0	<=73.9	Pass	Deadband	0.000	(1.484)
S-C1: Contribution to bathing waters improved	0.47	0.66	1.49	>=1.49	Pass	No reward	0.000	0.000
S-D1: Protecting rivers from deterioration	48.0	48.0	210.5	>=190.1	Pass	No reward	0.000	0.000
S-D2: Maintaining our wastewater treatment works	91.48	58.71	30.47	<=83	Pass	No reward	0.000	0.000
S-D3: Contribution to rivers improved	0.75	46.98	120.73	>=121.83	On track	Reward	0.428	0.823
S-D4a: Wastewater category 1 and 2 pollution incidents	4	2	0	<=3	Pass	No reward	0.000	0.000
S-D4b: Wastewater category 3 pollution incidents	136	150	129	<=198	Pass	Reward	3.278	9.834
Wastewater Service (net reward) £m							11.082	31.301

Forecast future performance

Actual performance against our wastewater service outcome delivery incentives in the first three years of the AMP6 period, together with forecast performance for the remaining two years of the period, is set out in the table below. Further information on each measure, including the rationale and potential risks and opportunities associated with the future performance projections is set out for each measure.

Information on the way that the predicted performance and incentive payments would impact upon bills in the 2020 – 2025 period (AMP7) is set out in “United Utilities Water PR14 reconciliation”, which is available on our website.

It must be recognised that performance against many of the outcome delivery incentives in the table below will be subject to a number of factors, which are at least in part outside of our direct control. Therefore the projections set out in the table below are indicative values only.

Actual and forecast performance of the Wastewater Services performance commitments and a projected view of financial performance at the end of AMP6

Performance commitment	Incentive type	Actual*				Forecast*		Projected AMP6 performance
		2015/16	2016/17	2017/18	Current financial position	2018/19	2019/20	
Private sewers service index	Reward & penalty	7.4	7.4	7.4	22.1	7.4	7.4	36.9
Wastewater network performance index	Penalty only	-	-	-	0.0	-	-	0.0
Future flood risk	Reputational	-	-	-	N/A	-	-	N/A
Sewer flooding index	Reward & penalty	-	(1.5)	-	-1.5	(8.9)	(8.7)	-19.2
Contribution to bathing waters improved	Penalty only	-	-	-	0.0	-	-	£0.0
Protecting rivers from deterioration	Penalty only	-	-	-	0.0	-	-	£0.0
Maintaining our wastewater treatment works	Penalty only	-	-	-	0.0	-	(4.4)	-4.4
Contribution to rivers improved (Ww) (NEP5)	Reward & penalty	-	0.4	0.4	0.8	0.1	(0.1)	0.8m
Wastewater (category 1&2) pollution incidents	Penalty only	-	-	-	0.0	-	-	0.0
Wastewater category 3 pollution incidents	Reward & penalty	-	-	-	9.8	3.28	3.28	16.4
Satisfactory sludge disposal	Penalty only	-	-	-	0.0	-	-	0.0
Wastewater services net: 2015/16-2017/18					£31.3m	net AMP6 projection		£30.5m

Relative intercompany performance

Our positive performance in wastewater has continued this year and we have met or out performed our targets for 10 of our 11 measures.

Performance in our wastewater network measures continues to improve as we further embed our operating model. This approach is helping to investigate the root cause and resolve incidents, addressing more incidents first time, reducing repeats and improving customer satisfaction.

We have also suffered fewer extreme weather events this year and as such have seen a significant reduction in flooding events. This has helped us to achieve our sewer flooding target for the first time this AMP. We continue to be industry leading for pollution incidents; not only in the number of incidents, but also in the number that we find and self-report to the Environment Agency.

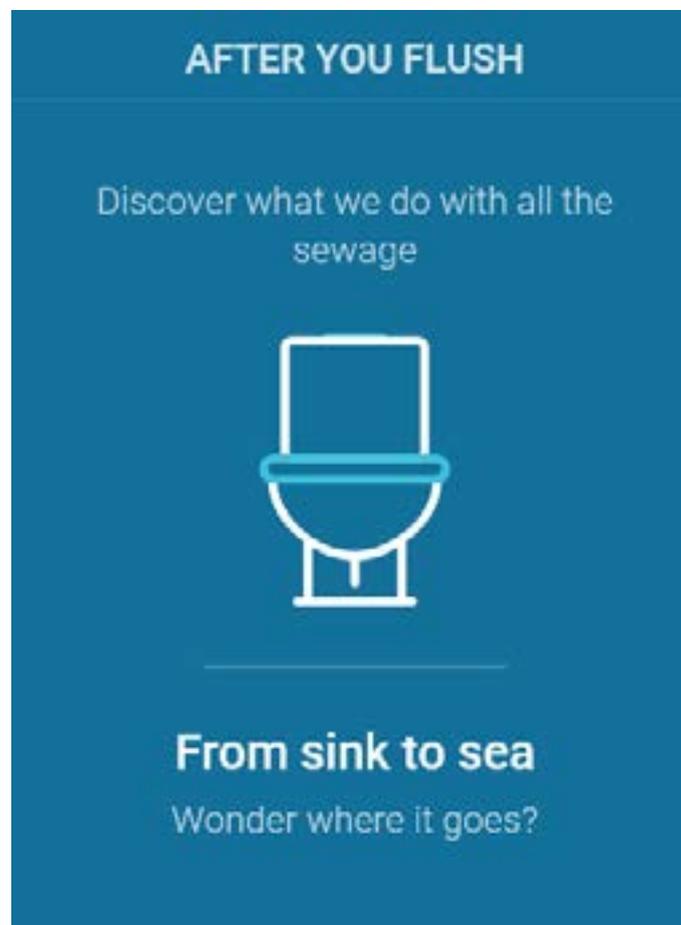
We continue to meet our targets on our delivery measures; each of these tracks the delivery of projects at our treatment works and on our wastewater network. Projects will help to improve our performance and reduce the impact that we have on the environment as well as improving the reliability and resilience of assets.

Our performance last year across a range of measures was published on the Discover Water website, which compared our performance against the performance of other water and wastewater companies.

We performed well against the Environmental Performance Assessed maintaining a four star rating as assessed by the Environment Agency (the highest rating possible). This measure assesses the performance of our WwTW and network assets against Environment Agency consents. Both internal and external flooding incidents are compared; for internal flooding our performance was higher than industry average (although this comparison includes all flooding incidents and so includes flooding that occurs during extreme weather events) and for external flooding incidents, we were slightly below industry average.

Comparable data for 2017/18 is not available until later in the year; however, we anticipate our comparable performance will improve as we have suffered from fewer extreme weather events. The discover water website can be found [here](#).

Discover Water website



Line 13 S-A1: Private sewers service index

Performance summary

In 2017/18 we continued to out perform our performance commitment achieving an index score of 85.0 against a target of 100. This has earned a reward of £7.376 million. We expect to continue this level of out performance throughout the remainder of the AMP.

Measure description

This performance commitment measures the performance of the former network of private sewers which transferred to us in 2010. It does this via an index of five sub measures:

- Internal and external flooding due to hydraulic overloading
- Internal and external flooding due to other causes
- Pollution incidents
- Sewer collapses
- Sewer blockages

Pollution incidents is the most heavily weighted of the sub measures against the overall index score.

The performance target has been set at a level of performance across AMP6 that is consistent with our typical performance in AMP5. The measure has financial penalties if performance deteriorates and financial rewards to encourage the company to improve performance and minimise customer impacts.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	100	100	100	100	100
Actual/Forecast	91.7	91.9	85.0	91.9	91.9
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£7.376m	£7.350m	£7.376m	£7.376m	£7.376m

Sub measure	Indicative target performance 2015/16	Actual performance 2015/16	Indicative target performance 2016/17	Actual performance 2016/17	Indicative target performance 2017/18	Actual performance 2017/18
Internal Hydraulic Flooding Incidents	<= 8	2	<= 8	1	<= 8	1
Internal Flooding other causes (FoC) Incidents	<= 393	416	<= 393	414	<= 393	275
External Hydraulic Flooding Incidents	<= 38	10	<= 38	5	<= 38	5
External FoC Incidents	<= 4,782	4,595	<= 4,782	4,594	<= 4,782	3,896
Collapse	<= 467	361	<= 467	391	<= 467	302
Blockage	<= 15,518	13,906	<= 15,518	14,031	<= 15,518	13,089
Pollution	<= 4	5	<= 4	1	<= 4	4



Overview of performance to date

In the three years from 2015/16 to 2017/18 we out performed our performance commitment. The majority of the improvement in private sewers performance has been driven by the continued embedment of our wastewater network operating model, which has an emphasis on first time resolution. Adopting this model has helped to reduce the numbers of repeat incidents.

In the first three years of the AMP, the level of investment on transferred assets has remained relatively stable, we are predicting to spend approximately the same amount of transferred assets for the remainder of the AMP6 period.

Penalty or out performance

We have achieved a reward of £7.376 million in 2017/18.

The measure is an index that comprises of five sub measures. The sub measures are weighted and summed to produce the index score with the overall index score rather than performance against any individual sub measure being used as the basis for the incentive calculation. If the overall index score falls within the penalty or reward zones then the incentive is calculated by multiplying the difference by a penalty rate of £4.204 million per index point or a reward rate of £1.069 million per point. Details of the calculation of this index measure as set out in Appendix 2.

Lessons learnt and action plan

We will continue with our first time reactive resolution model, targeting a reduction in incidents over the rest of the AMP. The probability of a reoccurrence of the weather patterns seen in the early part of the AMP is uncertain so any benefits from the additional rainfall will not necessarily be present in future years.

This level of performance may also have a positive effect on our sewer flooding index and pollution performance commitments.

Anticipated performance Years 4 and 5

Our current prediction is to continue investing and successfully maintain our operating model such that we earn a reward each year against this measure.

Future performance – risk, issue, concern, change or opportunity

1. There is a risk of additional incidents due to having less knowledge of transferred assets

This includes: historic problems which were previously not our responsibility, potentially poor asset condition and incidents from unknown assets which would be impossible to predict or prevent.

2. Inclusion of transferred sewers and 3rd party laterals serving properties built after 1st July 2011. There will be a very small number of non-qualifying incidents in our data. A review of these incidents is underway.

Line 14 S-A2: Wastewater Network Performance Index

Performance summary

We have out performed in this measure in 2017/18. We anticipate that we will continue to out perform our targets for the remainder of the AMP6 period.

Measure description

Our wastewater network performance index consists of four sub measures:

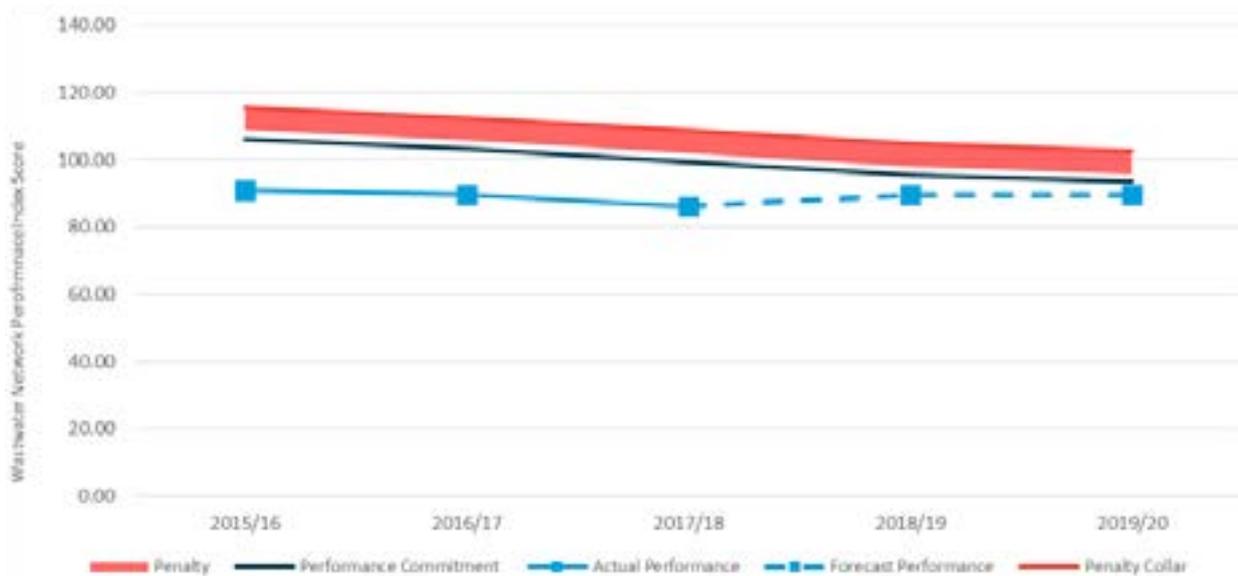
- Rising main failures
- Sewer collapses
- Sewer blockages
- Equipment failures

Rising mains bursts is the most heavily weighted of the four sub measures that contribute to the overall index score.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	106.2	103.2	99.4	99.4	93.4
Actual/Forecast	90.95	89.47	86.17	89.50	89.50
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0m	£0m	£0m	£0m	£0m

Sub measure	Indicative target performance 2015/16	Actual performance 2015/16	Indicative target performance 2016/17	Actual performance 2016/17	Indicative target performance 2017/18	Actual performance 2017/18
Rising Main Failures	40	51	40	46	<=40	47
Collapses	444	261	444	268	<=444	232
Blockages	8,754	7,473	8,425	7,469	<=8,015	7,047
Equipment Failures	2,403	2,704	2,383	2,322	<=2,358	3,088

Actual and forecast performance for the network performance index – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

We have out performed against this measure in years 1, 2 and 3 with an index score of 90.95, 89.47 and 86.17 respectively against a target of 106.2, 103.2 and 99.4.

The improved performance is primarily due to the continued embedment of our operating model, which seeks to resolve incidents quickly and effectively and address operational defects that may cause future or repeat incidents and affect our customers.

The use of our resolution units and the high specification equipment they are equipped with continues to positively impact on blockage volumes. In addition, our targeted ‘what not to flush’ campaign has also had a positive impact. It is possible that the increased flow from the wetter weather conditions may also have contributed to blockage performance given the flushing effect on the sewers with the increase in rainfall.

Our programme of work carrying out extensive field CCTV surveys has identified defects and collapses, which enables us to undertake proactive repairs, before they impact on our customers. Whilst proactive collapse repairs do increase the reported number for this measure, they do deliver benefits in terms of flooding and pollution risk reduction.

Penalty or out performance

Our wastewater network performance index consists of four sub measures: rising main failures, collapses, blockages and equipment failures. Each of these sub measures is weighted and then summed together to generate an index score. We compared the overall index performance against the target performance. If the performance falls within the penalty zone then we multiply the resulting difference by the incentive rate of £2.298 million per index point for penalty. Details of the calculation of this index measure are set out in Appendix 2.

The measure is incentivised by a penalty only so no reward has been achieved through this significant out performance.

Lessons learnt and action plan

Additional actions that will support the maintaining of this performance are:

- Continuing our activity to proactively repair collapses and identify other repairable defects. Sewer cleaning and CCTV activities will also continue throughout the AMP.
- Further education of customers on what not to flush/pour into the network.
- Better targeting of issues through the investigation of the root cause to problems.

Anticipated performance Years 4 and 5

We anticipate continuing to out perform against this measure and expect the general trend of reducing the number of blockages and collapses to continue. Unless there are some unforeseen circumstances we do not expect to incur a penalty on this measure for the rest of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. Reporting systems are being enhanced - This will enable further investigation and root cause analysis. Whilst this may have a positive impact to data quality through reducing manual processes there is the potential for data issues during implementation.
2. There is a limit to the operational technology and innovation available for inspecting rising mains. This leads to the potential for deterioration in rising mains and future failures.

Line 15 S-B1: Future flood risk

Performance summary

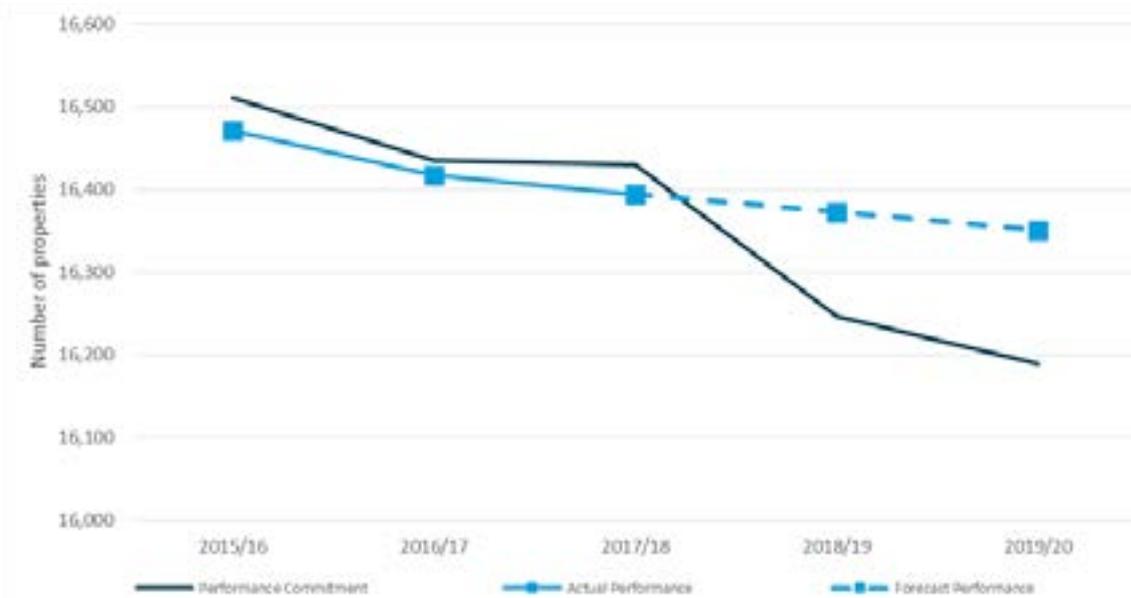
For the first two years of AMP6 we have achieved our target and reduced the number of properties from future flood risk. However, this year and the final two years of the AMP we anticipate that we will under perform on this measure.

Measure description

The future flood risk performance commitment uses overland flow hydraulic models to assess the risk that each property in the North West faces from sewer flooding. The aim of this measure is progressively to reduce the numbers of properties at modelled risk over AMP6 and is reputational only.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	16,511	16,436	16,341	16,247	16,190
Actual/Forecast	16,472	16,418	16,395	16,373	16,351
Pass/Fail	Pass	Pass	Fail	Fail	Fail
Out performance payment/ Penalty	£0m	£0m	£0m	£0m	£0m

Actual and forecast performance for future flood risk – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

The performance commitments for 2015/16 and 2016/17 have been out performed. For 2017/18 we have fallen short of our target.

Properties are removed from risk as a result of capital projects, appropriate mitigation or sustainable drainage schemes. The majority of risk removal in AMP6 has been as a result of providing mitigation to properties, this is the most cost effective method for customers. Mitigation minimises the chance of repeat sewer flooding and therefore there is also a related impact of this on the sewer flooding index measure.

Penalty or out performance

This measure is reputational only and so no financial penalty or reward will be applied.

Lessons learnt and action plan

Our sewer flooding targets for AMP6 are extremely challenging. In order to ensure the greatest benefit to customers we have focussed our programmes on flooding other causes as this results in the greatest proportion of affected customers. This has resulted in us delivering a lower number of large-scale capital solutions and focussing on blockage clearance and collapse repair. We also seek to install mitigation to prevent any reoccurrence of flooding.

Anticipated performance Years 4 and 5

Despite out performing the target in years 1 and 2, we have failed our target in year 3, and our current forecast for this measure is to under perform the performance commitment for the remainder of the AMP. Our data suggests that we will identify a lower number of properties where it is cost beneficial to reduce the risk of flooding and therefore it may not be possible to achieve our target.

Future performance – risk, issue, concern, change or opportunity

1. We will continue to review the types of solutions that can remove properties from being at risk of flooding, changes to the methodology could develop over the AMP. Any changes to the methodology will be fully understood and reported transparently.

Line 16 S-B2: Sewer flooding index

Performance summary

We have met our target on this measure in 2017/18, however, we did not receive a reward as our performance did not fall within the reward zone. We anticipate that we will receive penalties in both of the final two years of the AMP.

Measure description

Our sewer flooding index consists of five sub measures:

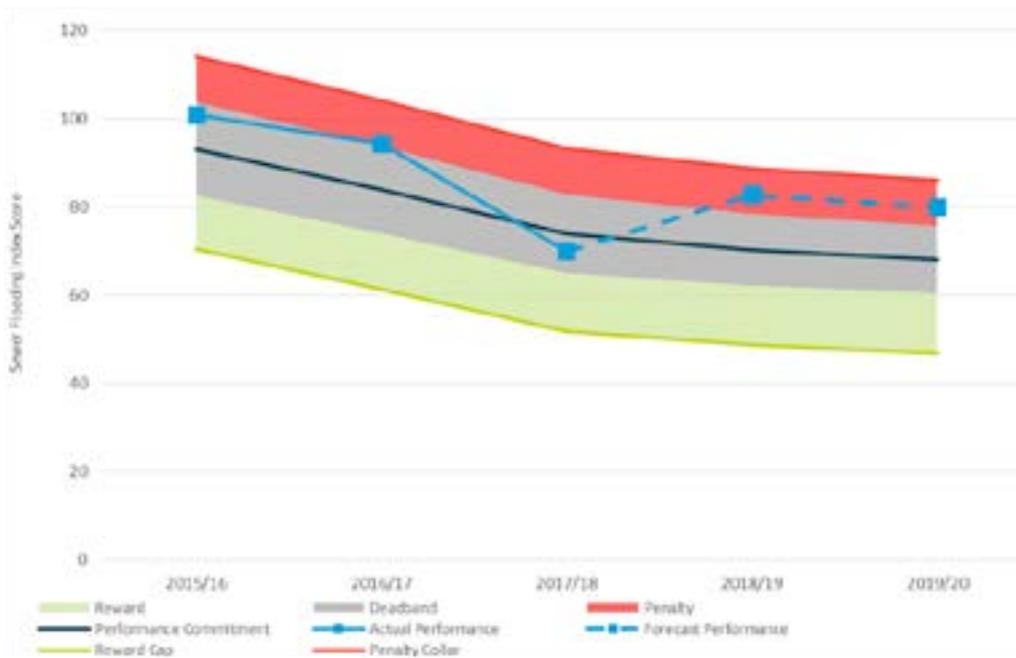
- Incidents of repeat flooding
- Internal flooding due to hydraulic overload
- External flooding due to hydraulic overload
- Internal flooding due to other causes
- External flooding due to other causes

Internal flooding due to hydraulic overload, internal flooding due to other causes and incidents of repeat flooding are equally the most heavily weighted of the five sub measures which comprise the overall index score.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	93.1	83.9	73.9	70.3	68.1
Actual/Forecast	100.8	94.4	69.99	82.80	80.0
Pass/Fail	Pass	Fail	Pass	Fail	Fail
Out performance payment/ Penalty	£0m	£1.484m	£0m	£8.941m	£8.737m

Sub measures	Indicative target performance 2015/16	Actual performance 2015/16	Indicative target performance 2016/17	Actual performance 2016/17	Indicative target performance 2017/18	Actual performance 2017/18
Repeat Flooding	<=367	377	<=388	362	<=303	206
Internal hydraulic incidents	<=100	147	<=78	147	<=55	91
Internal FOC incidents	<=607	839	<=491	794	<=375	559
External hydraulic incidents	<=499	455	<=499	215	<=499	212
External FOC incidents	<=3,878	3,991	<=3,715	3,274	<=3,512	2,863

Actual and forecast performance for the sewer flooding index – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

End of year performance for 2015/16 was within the deadband. In 2016/17 we under performed against this performance commitment this reflected the challenging target and resulted in a penalty of £1.48 million. In 2017/18 performance improved enabling us to achieve our target.

Having been set as part of Ofwat’s upper quartile challenge, the targets for this measure are very stretching, especially with this measure being extremely sensitive to severe weather events. In each year of the AMP so far we have suffered from major storm events and whilst the more extreme events are excluded from our analysis, such storms do inevitably contribute to the overall number of flooded properties. We are working hard to respond well to flooding events, ensuring we understand the cause so that we can look to resolve the issue appropriately. Our network operating model, along with sewer misuse customer education initiatives and partnership projects, is supporting our continued improvement in this area.

Penalty or out performance

This measure has both reward and penalty financial incentives.

Each of the sub measures is weighted and then added together to generate the index score. We compare the overall index performance against the target performance. If the performance falls within the penalty or reward-zone then we multiply the resulting difference by the relevant incentive rate. For the sewer flooding index the incentive rates are £2.032 million per index point for penalty and £1.050 million per point for out performance. Details of the calculation of this index measure are set out in Appendix 2.

For 2017/18 our index score was ahead of target but not within the reward zone.

Lessons learnt and action plan

We have a number of activities that are being implemented to support an improvement in performance, these include:

- Further embedment of our operating model which along with the further enhancements to the reactive resolution vehicles and the equipment on them will support our response to incidents.
- Reviewing the way we assess, operate and manage our networks. This will result in changes to the way we identify risk, resolve incidents and understand connectivity across our networks. Additionally real time monitoring of key points on the network will allow us to identify issues and prevent flooding. All of this will contribute to reductions in blockages, collapses and flooding.
- A campaign of targeting areas for what not to flush, this aims at reducing other causes incidents through customer engagement. Our customer engagement trials and research in relation to sewer misuse have revealed the most efficient approaches to adopt in order to reduce blockages. We will be carrying out large-scale customer engagement campaigns, based on the findings from our Preston trial, which demonstrated a 60% reduction in unflushable items disposed. We have complimented this research with a partnership project, working with Keep Britain Tidy to understand customer attitudes and flushing behaviour in order to co-create solutions with customers and supermarkets.
- Proactive strategy of identifying defects and collapses through the use of extensive field CCTV surveys.

Anticipated performance Years 4 and 5

Performance in 2016/17 resulted in a penalty on this measure and whilst performance in 2017/18 has been good, due to the stretching target alongside the impact of favourable weather conditions, we believe that it is unlikely that we will be able to avoid a penalty in years 4 and 5. This is due to the scale of the reduction required over the remainder of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. This measure is particularly vulnerable to other variables such as rainfall. The number of flooding incidents can be significantly affected by factors outside of our control and therefore this makes predicting the performance for the remainder of the AMP complex.
2. 3rd party damage or sewer abuse. This has the potential to result in high numbers of flood impacted properties which can be outside our control.

Line 17 S-C1: Contribution to bathing waters improved

Performance summary

In 2017/18 we achieved our performance commitment target. We anticipate that we will achieve our target in the next two years of the AMP.

Measure description

This performance commitment measures the delivery of the programme of work which we have agreed with the Environment Agency to improve the impact that our assets have on bathing water compliance. Each project in this programme has been assigned an impact upon bathing water compliance called a bathing water equivalent (BWE), which is proportionate to the impact that completing the project will have on a designated bathing water. The measure is penalty only.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	=>0.36	=>0.66	=>1.49	=>3.78	=>6.56
Actual/Forecast	0.47	0.66	1.49	3.78	6.56
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment /Penalty	£0	£0	£0	£0	£0

Actual and forecast performance for contribution to bathing waters – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

In 2015/16 we out performed against our performance commitment and achieved the performance commitment in 2016/17 and 2017/18.

The out performance in 2015/16 was due to the early delivery of the Coastal Misconnections (CSW) programme. The projects delivered to date are shown in the table below.

Project	EA NEP reference	Date delivered	BWE benefit	Cumulative benefit
Allonby Storm Tanks	6UU0018	31/03/16	0.31	0.31
Event Duration Monitors – year 1	Various	31/03/16	0.05	0.36
Misconnections	6UU0022	31/03/16	0.11	0.47
Hesketh Bank Storm Tanks	6UU0520	31/03/17	0.09	0.56
Mersey/North Wirral investigations	6UU0030	31/03/17	0.03	0.59
Tidal Ribble investigation	6UU0021	31/03/17	0.07	0.66
Chorley WwTW Storm Tanks	6UU0013	30/04/17	0.26	0.92
Hagg Lane	6UU0019	30/04/17	0.21	1.13
Allonby Storm Tanks	6UU0018	31/03/16	0.31	0.31
Ravenglass WwTW	6UU0504	31/12/17	0.10	1.23
Ravenglass Storm Tanks	6UU0505	31/12/17	0.10	1.33
Ravenglass Inlet CSO	6UU0506	31/12/17	0.10	1.43
Kendal WwTW	6UU0509	31/12/17	0.05	1.48
Event Duration Monitors – year 3	Various	31/03/18	0.01	1.49

Penalty or out performance payment

The measure is penalty only, with a penalty rate of £10.0 million per bathing water equivalent. This rate increases to £20 million in the final year of the AMP.

Lessons learnt and action plan

As this performance commitment is penalty only it is in our best interest to achieve the target performance commitment. There is no reward for early delivery of schemes as our PR14 research suggested that our customers wished for us to deliver our obligations on time, therefore there is no financial advantage in early delivery.

However, any early delivery of schemes to enhance bathing and shellfish waters will protect our coastal waters sooner and ensure we are playing our part in ensuring all bathing waters in the North West meet at least 'sufficient' standard.

For three schemes (Anchorsholme, Blackburn and Schola Green), the Ofwat and Environment Agency delivery dates were initially different. The performance commitment is measured against the Ofwat delivery dates as we were not able to guarantee delivery to the dates required by the Environment Agency in its National Environment Programme (NEP).

We wrote again to the Environment Agency to request a date change for these schemes and this has now been agreed. In all cases we are working to ensure we deliver these schemes as soon as possible so that the environmental benefit is secured.

Project	EA NEP reference	Planned delivery date	BWE benefit	Cumulative benefit
Manchester Square	6UU0011	30/04/18	0.68	2.17
Chatsworth Avenue	6UU0012	30/04/18	0.68	2.85
Preston Storm Tanks	6UU0015	30/04/18	0.68	3.53
Ulverston Storm Tanks	6UU0510	31/03/19	0.25	3.78
Dragley Beck	6UU0511	31/03/19	0.00	3.78
Anchorsholme	6UU0010	30/04/19	0.68	4.46
Raby Cote	6UU0020	30/04/19	0.74	5.20
Schola Green	6UU0016	30/03/20	0.79	5.99
Blackburn Storm Tanks	6UU0014	31/03/20	0.57	6.56

Anticipated performance Years 4 and 5

Our forecast performance is in line with our performance commitment. We anticipate that we should be able to deliver this programme of work by the end of the AMP and as such will not incur a penalty. The remaining schemes are as set out in the table above. Further details on the projects delivered to date and anticipated delivery dates of the remaining projects within this programme are set out in our PR14 reconciliation document, which is published on our website.

Future performance – risk, issue, concern, change or opportunity

Risk of late delivery. There is the risk that projects could be delivered late and incur penalty if unforeseen circumstances impact on the delivery schedule however, we are currently on track to deliver as planned.

Line 18 S-D1: Protecting rivers from deterioration due to population growth

Performance summary

We have out performed our target for this performance commitment. We expect we will be able to continue to out perform this measure in the remainder of the AMP despite much tougher targets.

Measure description

This measure seeks to protect rivers from deterioration as a result of an increase in population and consequently flow and load at our works.

It is based upon the delivery of a programme of improvements at our wastewater treatment works, which will be delivered across AMP6.

The programme is flexible in both delivery timescales for individual projects and the number and location of wastewater treatment works identified for investment providing that overall the project(s) deliver at least the defined km for each year of the AMP (cumulative). This allows the programme to respond to changes in the location or timing of developments within the North West. A penalty incentivises this measure.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	=>1.8	=>1.8	=>190.1	=>316.7	=>346.6
Actual/Forecast	48.02	48.02	210.49	318.0	365.7
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0	£0	£0	£0	£0

Actual and forecast performance for protecting river from deterioration due to population growth – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

We are currently ahead of the target for this measure. During 2015/16 (in response to development), we significantly out performed against this measure. Even though we did not deliver any projects in 2016/17, due to the AMP6 annual targets being cumulative, the out performance in year 1 was carried over into 2016/17 and provides some headroom for subsequent years in the AMP. No projects were identified in the final business plan to deliver in 2016/17 and no other projects have been identified as delivering early so the cumulative performance at the end of year 2 remained at 48.02km. In year 3 we delivered six schemes and increased our cumulative total to 210.5km.

The projects delivered to date are as shown in the table below.

Project	Date delivered	Km of river protected	Cumulative benefit
Moston West	31/03/16	48.02	48.02
Chorley WwTW	28/04/17	18.91	66.93
Wetheral and Great Corby	29/03/18	0.96	67.89
Davyhulme WwTW	31/03/18	125.5	193.39
Cockermouth WwTW	23/03/18	15.22	208.61
Brigham WwTW	23/03/18	1.27	209.88
Papcastle WwTW	23/03/18	0.60	210.48

Re-prioritisation of supply demand projects occurs as better information on the extent and location of forecast growth is derived. This can lead to changes to the original list of projects to be delivered, but as the target km for each year are not at specified locations, these changes can be managed at a programme level, reducing the risk of under performing against our performance commitment.

Penalty or Reward

A penalty incentivises this measure. For this ODI we compare our actual performance against the target performance. If the performance falls within the penalty zone then we multiply the resulting difference by the incentive penalty rate at £0.058 million per km.

Lessons learnt and action plan

We have developed a dynamic programme so that over the remaining years of the AMP we can respond to the needs of developers to provide the additional capacity needed. We are able to target our investment appropriately to meet the performance commitment whilst using the most up to date information of demand across our region. The continuous review of risk to wastewater treatment works from new development enables us to deliver solutions in the highest priority locations.

In year 1 we were able to out perform the target through the delivery of a scheme at Moston West where growth had occurred rather than the originally planned scheme at Kingsmill where the demand had not materialised. Whilst this should ensure that we are able to meet the performance commitment across the remainder of the AMP there is still potential for the programme to change should growth not occur as planned which could lead to penalties if schemes do not deliver by the forecast timescale and/or alternative projects are not viable.

We continually review the timescale and scope of new development at the sites identified within our programme and at others areas that may be at risk. This ensures appropriate prioritisation of investment and ensures we can meet the growing needs of our region.

Anticipated performance Years 4 and 5

We are predicting that we will out perform our performance commitment for the remainder of the AMP for this measure but there are some delivery risks which could impact on this towards the end of the AMP, we have also identified some opportunities that may support ensuring deliver of the commitment. The current planned schemes for the remainder of the period are as set out in the table below.

Project	Planned delivery date	Km of river protected	Cumulative benefit
Dearham WwTW	FY19	10.00	220.48
Silloth WwTW	FY19	7.70	228.18
Winsford WwTW	FY19	14.59	242.77
Endmoor WwTW	FY19	10.99	253.76
Bootle WwTW	FY19	29.76	283.52
Barton WwTW	FY19	25.80	309.32
Sandbach WwTW	FY19	8.63	317.95
Cuddington WwTW	FY20	4.34	322.29
Oakmere WwTW	FY20	0.60	322.89
Crewe WwTW	FY20	42.58	365.47
Whalley WwTW	FY20	0.18	365.65

Future performance – risk, issue, concern, change or opportunity

1. Delivery timescale estimates. The delivery dates used in assessing the performance commitment are estimates and may change over time. If delayed or accelerated due to construction issues or opportunities this can have an impact on the overall programme.
2. Projects where the need to facilitate new development may be delayed or removed. There are a wide range of schemes falling into this category that may result in a change to our planned programme of work.
3. Projects that were not previously included on the AMP6 programme, but have since had a need identified due to forecast population increase could be added to the programme. There are a wide range of schemes falling into this category that may result in a change to change to our planned programme of work.
4. Project delays and acceleration within the AMP. The scheme at Whalley WwTW (0.2 km) has been delayed to 2019/20 from 2017/18. This shouldn't have any impact on the performance commitment due to out performance in year 1.

Line 19 S-D2: Maintaining our wastewater treatment works

Performance summary

We have out performed on this measure in 2017/18. Despite this, we anticipate that our performance will fall within the penalty zone for the final year of the AMP 6 period.

Measure description

This performance commitment is an index, which monitors the number of wastewater treatment works (WwTW) that fail their consent, together with the number that operate at medium and high risk of failure. This is a penalty only measure.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	83.00	83.00	83.00	54.32	46.13
Actual/Forecast	91.4847	58.7100	30.4680	83.8370	84.1048
Pass/Fail	Fail	Pass	Pass	Fail	Fail
Out performance payment/ Penalty	£0	£0	£0	£0	£4.39m

Actual and forecast performance for maintaining our WwTW – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

We out performed against our performance commitment in 2016/17 and 2017/18 which is an improvement on 2015/16 performance where the performance commitment was not achieved, although penalty deadband was not breached.

The relatively high index score in year 1 was largely attributable to the failure of two size band 5 wastewater treatment works (Alsager and Longton), two band 6A wastewater treatment works (Congleton and Leigh) and a band 6B wastewater treatment works (Liverpool). This resulted in an index score of 91.485 against the performance commitment of 83.0.

The index score in year 2 was mainly attributable to the failure of two size band 1-4 works; Audley and Ambleside and three size band 6a works; Altrincham, Crewe and Oldham. This gave an overall score of 58.708.

In year 3 the index score was predominantly due to the failure of three size band 1-4 works; Ambleside, Bunbury and Great Clifton and one size band 6a works; Crewe. This gave an overall score of 30.50 which is the best performance to date.

Penalty or out performance payment

This is a penalty only measure. The size of any penalty is calculated by comparing our actual index performance against the target index performance. If the performance falls within the penalty-zone then we multiply the resulting difference by the penalty rate of £0.572 million per index point. In 2017/18 we out performed against the performance commitment target of 83.0 points, achieving 30.4680 index points.

Lessons learnt and action plan

The forecast for under performance is due to the risk of large works (size bands 6A and 6B) failing whilst the performance commitment and penalty deadbands reduce in 2018 and 2019. The reduction in the performance commitment results in there being less headroom for further fails, particularly if a large works were to fail.

The continued embedment of our environmental compliance programme will help reduce compliance risk. This programme focuses on people, processes, systems and data. The programme aims to deliver a step change improvement in compliance with our regulatory permits through implementing clear processes and accountability, supported by systems and training to enable our field teams to deliver improved levels of performance.

Anticipated performance Years 4 and 5

Despite our good performance in years 2 and 3 we recognise that meeting these levels of compliance is a challenge and our forecast is for an under performance against the performance commitment including breaching the penalty deadband for the final two years of the AMP resulting in an anticipated penalty. Although we will continue to manage and mitigate the risks associated with this measure through targeted capital investment and by operating our works to the highest standard, the performance commitment becomes increasingly challenging across the remainder of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. The failure of one or more of our large works could have significant impact on the measure in future years as targets become tighter.

Line 20 S-D3: Contribution to rivers improved – wastewater programme

Context

The initial target for this measure was based upon assumed delivery of a number of AMP5 projects which were due to be delivered in the current AMP6 period plus the new AMP6 programme of work set out within the national environment programme at the time of the business plan submission.

Following the PR14 final determination, the delivery dates for some of the AMP5 projects were revised and a new national environmental programme (NEP5) was agreed with the EA.

In response to these changes Ofwat published a corrigendum on its website which included two profiles. One including the AMP5 revisions only (the corrigendum profile below) and one with all changes including NEP5 revisions.

We are aiming to deliver the programme in line with the NEP5 dates agreed with the EA. Although for transparency we report our progress against both programmes.

Detail of performance against the programme excluding the NEP5 targets is set out in our PR14 reconciliation submission, which is available on website.

Performance summary

We have delivered all of the NEP5 projects by or before the date set out in NEP5. There have however, been some delays to an AMP5 carryover project that was included within the programme.

This means that the cumulative target at the end of March 2018 was slightly behind the anticipated target at that date. Although as more projects have been delivered early than late the measure is showing a slight reward.

Measure description

This measure tracks the delivery of our National Environmental Programme (NEP) obligations and is achieved through the delivery of an extensive programme of capital projects and investigations throughout AMP6. This measure has financial penalties and out performance payments.

Although the target is reported on a cumulative basis, the measure assesses the delivery of improvements on a project by project basis. Out performance payments or penalties are developed, which are dependent upon both the length of river improved by the scheme and the scale of any acceleration or delay in delivering this improvement:

Corrigendum profile

The table below shows the target for this measure published within the corrigendum on Ofwat's website.

Regulatory targets for the 'contribution to rivers improved' (wastewater programme) corrigendum profile

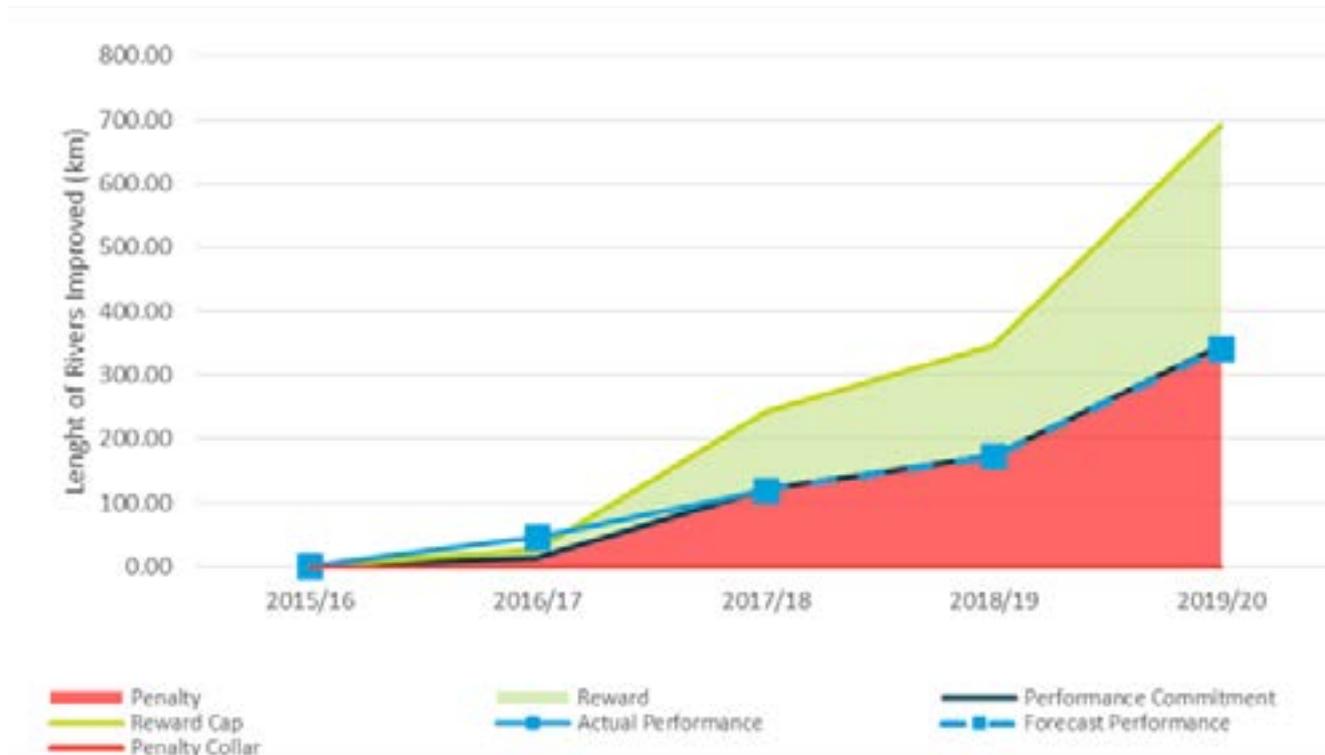
Unit of measure	2015/16	2016/17	2017/18	2018/19	2019/20
Km of river improved	0.75	15.41	98.14	145.39	355.22

The target for the measure, taking account of the changes to the programme set out within NEP5 is shown in the table below.

NEP5 profile

Unit of measure	2015/16	2016/17	2017/18	2018/19	2019/20
Km of river improved	0.75	14.12	121.83	173.38	345.97

Regulatory targets for the ‘contribution to rivers improved’ (wastewater programme) NEP5 programme



Overview of performance to date

Over AMP6 we are planning to deliver the programme of work set out by and agreed with the EA through NEP5 and as such our reporting focusses on delivery against the NEP5 target dates and performance commitment targets.

In year 1 we delivered the schemes required as part of our NEP. In year 2 we delivered some schemes earlier than required by NEP5 and were therefore able to out perform and earn a small reward, as this is a cumulative measure, the benefit of this reward is also reflected in the incentive position at the end of year 3.

The out performance in year 2 was as a result of early delivery of the “No Deterioration” schemes at Horwich WwTW and Dalston WwTW and the early delivery of the “UWWTD” scheme at Altrincham WwTW.

During 2017/18 we have delivered the projects set out within NEP5. There have however, been some delays to the AMP5 carry over project at Oldham WwTW. Oldham WwTW is however, complying with the environmental standards required by the project and the work involved to complete the project will have limited environmental impact. However, as the project has not been fully delivered we are including the penalty associated with this delay in our reported value.

At the end of 2017/18 the cumulative length of river improved was slightly lower than the NEP5 target. However as the environmental impact of the accelerations to projects to date (as measured through the performance commitment calculation) is greater than the impact of the delay to the scheme at Oldham the net position to date is a net out performance payment of £0.43 million.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	=>0.75	=>14.12	=>121.83	=>173.38	=>345.97
Actual/Forecast	0.75	46.98	120.73	173.18	342.75
Pass/Fail	Pass	Pass	On track	On track	On track
Out performance payment/ Penalty	£0m	£0.39m	£0.43m	£0.07m	-£0.05m

Penalty or out performance payment

This measure has both penalties and rewards. The size of any incentive is calculated by comparing our actual index performance against the target index performance. This measure looks at the total impact of the programme delivered each year, and assess how late or early this was (ODI factor). The penalty or reward is then calculated by multiplying; the rivers improved length by the ODI factor by the penalty rate (£0.111 million per index point) or reward rate (£0.028 million per index point).

Lessons learnt and action plan

We will continue to monitor and track projects against the programme of expected deliverable dates. At the end of the AMP we are delivering some of our more complex projects, and delivery against schedule will be difficult.

Anticipated performance Years 4 and 5

There have been a number of additional variations in the programme since NEP5 was finalised. These mainly relate to small variations in multi site programmes such as flow monitoring schemes, with these being reflected in the overall performance commitment value reported.

There are three major schemes however, where there have been changes:

- Whalley WwTW, where the EA have confirmed that the scheme is no longer required;
- CHRO012 (WFD), an improvement to an unsatisfactory intermittent discharge; and
- Manchester Ship Canal (F1a), installing aeration in the canal. We are seeking to replace these two schemes with equivalent schemes at Motherby and Barrow Nook. Although this still needs to be confirmed with the EA.

The removals or revisions from the programme, reduce the length of river improved, which means that we are expecting to end the five year period with a small out performance payment.

We are on track to deliver all other schemes within the programme.

Future performance – risk, issue, concern, change or opportunity

Risk of late (or early) delivery:

1. There is the risk that deliverability or third party issues could result in projects being delivered late.
2. Equally there is the potential that schemes could progress faster than anticipated.
3. A monthly review is completed to consider any risks associated with delivery.

Line 21 S-D4a: Wastewater serious (category 1 and 2) pollution incidents

Performance summary

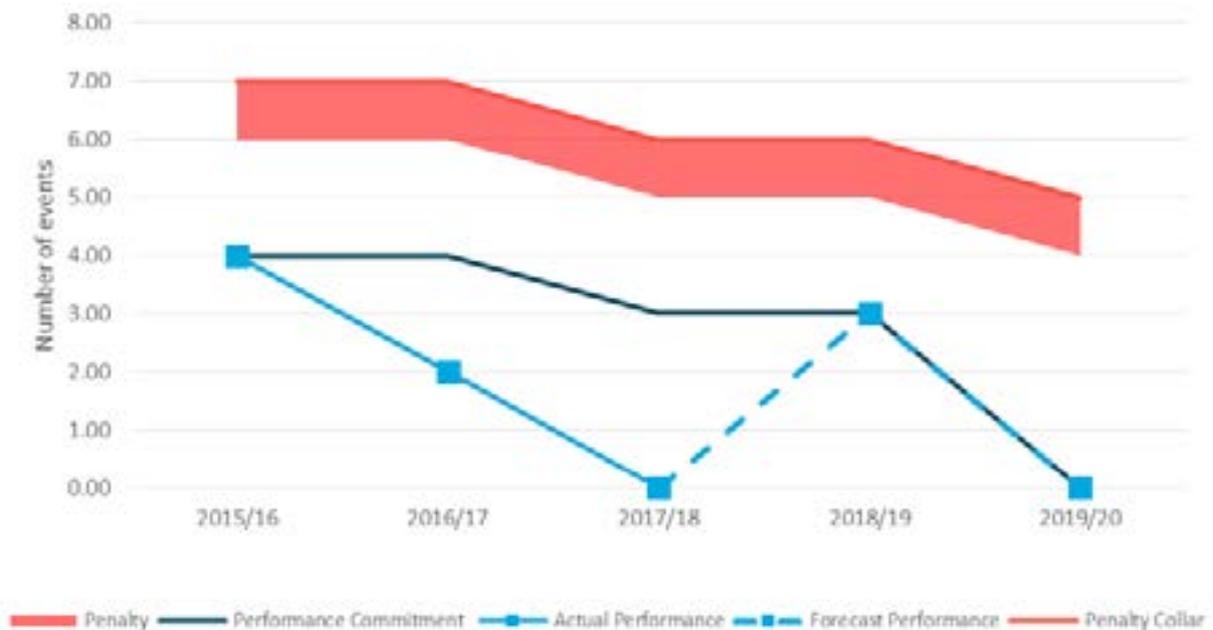
We have consistently out performed in this measure throughout the first three years of AMP6. We expect we will continue to improve our performance and out perform our targets in years 4 and 5 of the AMP.

Measure description

This measure tracks the number of category 1 and 2 (serious) pollution incidents that occur as a result of the performance of our wastewater assets. This is a penalty only measure.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	4	4	3	3	0
Actual/Forecast	4	2	0	3	0
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0m	£0m	£0m	£0m	£0m

Actual and forecast performance for serious pollution incidents – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

Over the AMP6 period to date the number of incidents has reduced year on year. There was a total number of four incidents in 2015, two incidents in 2016 and one in 2017.

Our performance has been as a result of:

- Our environmental compliance green tick campaign
- The revised wastewater operating model
- Our proactive strategy of identifying defects and collapses through the use of extensive field CCTV surveys
- Raising awareness of the 16/02 process (the Environment Agency's Guide to its operational staff) on categorisation and self-reported incidents
- Carrying out analysis for all repeat and self-reported incidents
- The process of 72 hour reporting and 20 days reports for more serious incidents ensuring scrutiny of the data collected and enabling actions to be taken following a pollution incident.

Penalty or out performance payment

This is a penalty only measure, with the scale of any penalty being assessed by comparing our actual performance against the target performance. If the performance falls within the penalty-zone then we multiply the resulting difference by the penalty incentive rate of £0.420 million per incident.

Each year we have out performed our performance commitment however as this is penalty only measure we did not earn any reward.

Lessons learnt and action plan

There are a number of actions being implemented to support us in maintaining/improving performance, these are as follows:

- The development of IDAS (Integrated Drainage Area Studies) and WwNM (Wastewater Network Management)
- Continuing to raise awareness of the Environment Agency's 16/02 process throughout the business
- Improved monitoring equipment being installed on the network, this will reduce the number of customer generated pollution incidents as the monitors will detect and then prompt our teams to attend sites to investigate, proactively preventing potential pollution incidents
- Joint training planned with the Environment Agency on permit conditions. This will improve understanding of our permits, increasing consistency with other water companies and reduce the risk on non-compliance.

Anticipated performance Years 4 and 5

The current plan is to achieve the performance commitment for the rest of the AMP, dropping to zero incidents in 2019. Whilst we typically only have a low number of incidents meeting this target will be challenging.

Future performance – risk, issue, concern, change or opportunity

1. EDM exclusion:

- Where a pollution incident is found solely through data provided by Event Duration Monitors (EDM) installed as part of the NEP, the incident is excluded from this measure.
- Our processes have been updated to ensure that this exclusion is operated however there is a risk that, as this new process is implemented, errors could occur. This could lead to reporting to many or too few incidents.

2. Discrepancy with Environment Agency data. This measure is very similar but not identical to the EA's pollution measure. Further details of the differences can be found in our definition documents.

3. Change of approach to enforcement by the Environment Agency. If the Environment Agency adapted its approach to enforcement this could lead to an increase in recorded incidents.

Line 22 S-D4b: Wastewater category 3 pollution incidents

Performance summary

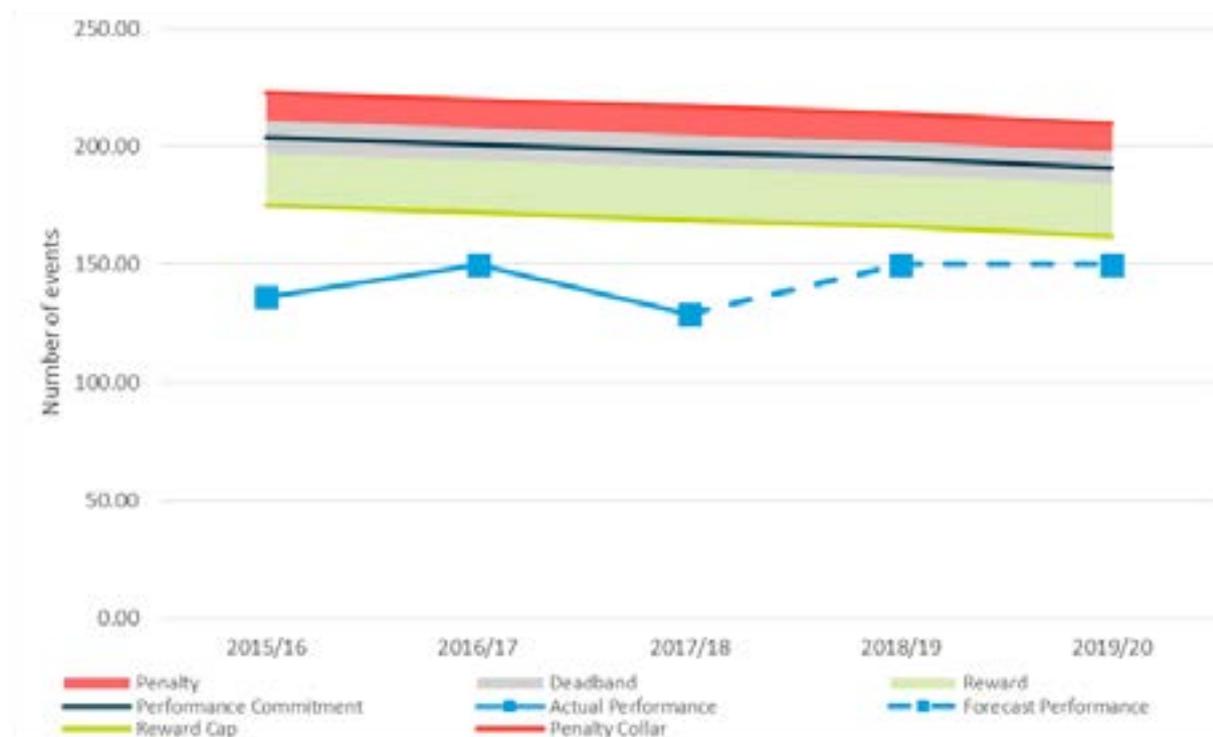
We have out performed our target for this measure in all three years of AMP6 thus far. We anticipate we will continue to out perform in the final two years.

Measure description

This measure assesses the number of category 3 pollution incidents that occur from our wastewater assets each year of the AMP. Performance is incentivised through both reward and penalty.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	204	201	198	195	191
Actual/Forecast	136	150	129	150	150
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£3.278m	£3.278m	£3.278m	£3.278m	£3.278m

Actual and forecast performance for category three pollution incidents – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

Our performance has been good across the early part of the AMP. Our investment programme has supported the achievement of this performance, along with an increase in the length of sewers being CCTV'd during incident attendance which is helping to proactively highlight sewer defects for repair.

Our performance has been as a result of:

- Our environmental compliance green tick campaign
- The revised wastewater operating model
- Our proactive strategy of identifying defects and collapses through the use of extensive field CCTV surveys
- Raising awareness of the 16/02 process (the Environment Agency's Guide to its operational staff) on categorisation and self-reported incidents
- Carrying out analysis for all repeat and self-reported incidents
- The process of 72 hour reporting and 20 days reports for more serious incidents ensuring scrutiny of the data collected and enabling actions to be taken following a pollution incident.

Penalty or out performance payment

This measure has both penalties and rewards, with the scale of any incentive being assessed by comparing our actual performance against the target performance. If the performance falls within the reward or penalty-zone then we multiply the resulting difference by the relevant incentive rate. For category 3 pollution incidents, the penalty incentive rate is £0.282 million per incident and £0.149 million per incident for the reward.

We have significantly out performed our performance commitment in each of the first three years of AMP6, resulting in the maximum annual reward.

Lessons learnt and action plan

There are a number of actions being implemented to support us in maintaining/improving performance, these are as follows:

- The development of IDAS (Integrated Drainage Area Studies) and WwNM (Wastewater Network Management)
- Continuing to raise awareness of the Environment Agency's 16/02 process throughout the business
- Improved monitoring equipment being installed on the network, this will reduce the number of customer generated pollution incidents as the monitors will detect and then prompt our teams to attend sites to investigate, proactively preventing potential pollution incidents
- Joint training planned with the Environment Agency on permit conditions. This will improve understanding of our permits, increasing consistency with other water companies and reduce the risk on non-compliance.

Anticipated performance Years 4 and 5

We believe that the significant over performance we have seen in the early part of the AMP can be sustained for the future and therefore we are projecting continuing to out performance and earn a reward for the remainder of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. EDM exclusion. Where a pollution incident is found solely through data provided by Event Duration Monitors (EDM) installed as part of the National Environment Programme (NEP), the incident is excluded from this measure.
2. Our processes have been updated to ensure that this exclusion is operated however there is a risk that, as this new process is implemented, errors could occur. This could lead to reporting too many or too few incidents.
3. Discrepancy with Environment Agency data. This measure is very similar but not identical to the EA's pollution measure. Further details of the differences can be found in our definition documents.
4. Change of approach to enforcement by the Environment Agency. If the Environment Agency adapted its approach to enforcement this could lead to an increase in recorded incidents.

Line 23 S-D5: Satisfactory sludge disposal

Performance summary

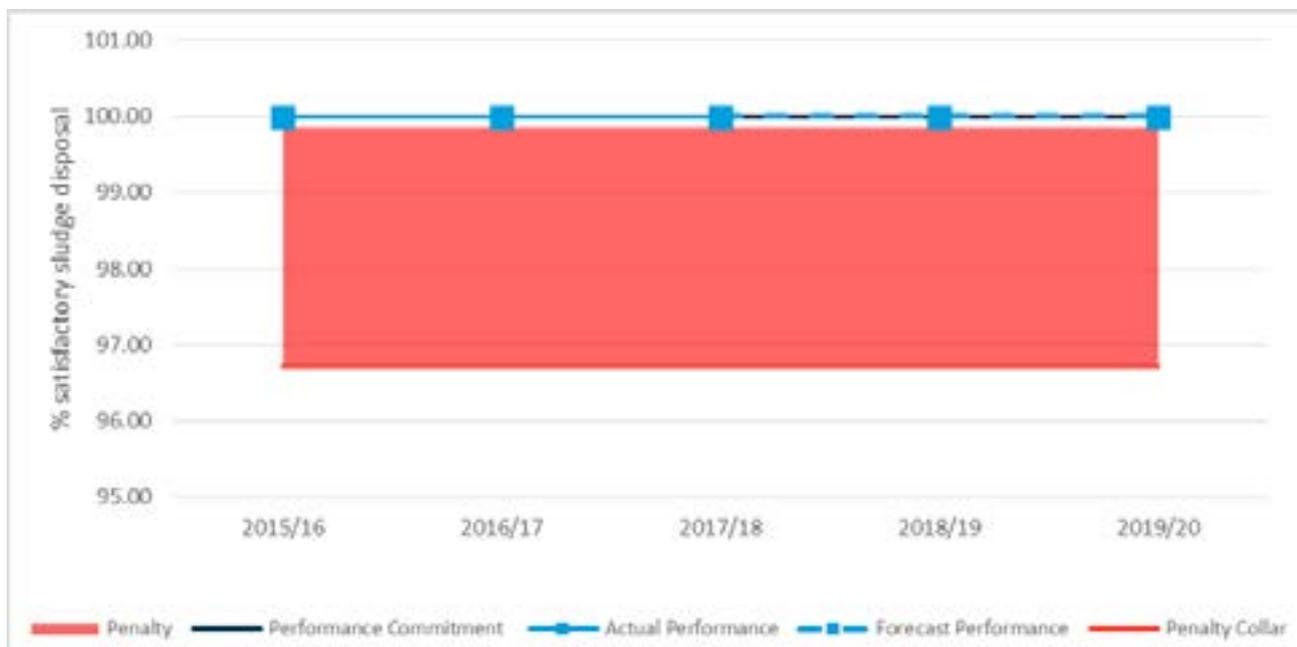
We have out performed our target on this measure for the first three years of AMP6. We expect that we will continue to out perform our target for the next two years.

Measure description

This performance commitment measures how well we operate our sludge treatment and disposal activities with respect to public health, environmental protection and statutory compliance. This is a penalty only measure.

	2015/16	2016/17	2017/18	2018/19	2019/20
Target	100	100	100	100	100
Actual/Forecast	100	100	100	100	100
Pass/Fail	Pass	Pass	Pass	Pass	Pass
Out performance payment/ Penalty	£0m	£0m	£0m	£0m	£0m

Actual and forecast performance satisfactory sludge disposal – AMP6 actual and forecast performance against performance commitment and financial incentives



Overview of performance to date

Performance for 2015/16, 2016/17 and 2017/18 is 100.00% satisfactory sludge disposal, meaning that the target has been achieved.

Our Regional Sludge Operational Model (RSOM) now provides a measured value for input into the performance commitment calculation. This has increased the volume of raw sludge produced when compared to 2015/16. This higher value is in line with our approach to measure sludge production to improve accuracy and will lower the impact of any unsatisfactory sludge disposed in the calculation.

Penalty or out performance payment

This is a penalty only measure, with the size of any penalty calculated by comparing our actual percentage compliance against the target of 100% compliance. If the performance falls within the penalty-zone then we multiply the resulting difference by the penalty incentive rate of £5.108 million per percentage point.

Lessons learnt and action plan

Achieving the target level expressed in the measure will help to maintain the confidence of both our regulators and stakeholders in the agricultural sector and wider food chain that use our treated sludge as an alternative to fertiliser.

Use of the Biosolids Assurance Scheme (BAS) certification from 2017 will also improve the quality management system for sludge. Any audit findings will support continuous improvement and help us to sustain 100% performance.

Anticipated performance Years 4 and 5

To date this AMP we have achieved 100% satisfactory sludge and are on track to deliver this level of performance throughout the remainder of the AMP.

Future performance – risk, issue, concern, change or opportunity

1. Our strategic approach for sludge proposes a move away from traditional Mesophilic Anaerobic Digestion (MAD) to future investment in Advanced Anaerobic Digestion (AAD) technology.
 - The AAD process attains a greater level of pathogen reduction (typically 6 log) than MAD (3 log), which naturally reduces the likelihood/risk of producing non-compliant sludge at these sites.
2. In the future, we may engage in Commercial and Co-digestion activities and sludge trading with other Water companies (both in and out).
 - We will need to update our reporting to account for these potential inputs and outputs.

1.1 c) Retail and customer service performance commitments

2017/18 Annual performance summary

Performance against our four household retail performance commitments in 2017/18 and the cumulative performance in the AMP6 period to date, is set out in the table below.

Household retail operational performance summary (2017/18)

Performance commitment	Actual			Performance Commitments		Incentives		
	2015/16	2016/17	2017/18	2017/18	Pass / Fail	Impact	2017/18 Annual (£m)	2017/18 Cumulative (£m)
A-1: Service incentive mechanism (SIM) ¹	82	85	87	UQWASC	TBC	Financial	TBD	TBD
R-A2: Customer Experience Programme ²	0.001	0.363	2.576	>=6.396	On track	Financial	N/A	N/A
B1: Customers saying that we offer value for money	50	52	52	51	Pass	Reputational	N/A	N/A
B2: Per household consumption	303	305	311	289	Fail	Reputational	N/A	N/A

¹The financial incentive applied to SIM will be determined by Ofwat through the PR19 process based upon performance up to 2018/19

²The customer experience ODI measure compares actual depreciation incurred on the programme against assumed depreciation for the programme, although the programme is on track to deliver ahead of the originally assumed schedule, the costs of the programme and resultant depreciation has been lower than assumed with some of this efficiency saving being shared with customers through the ODI. The measure only generates a final position at the end of 2019/20, annual performance assesses if delivery is on track to achieve this target.

Line 24 A-1: Service incentive mechanism (SIM)

15/16 (Actual)	16/17 (Actual)	17/18 (Actual)	17/18 target	17/18 Incentive	Incentive AMP6
82 ¹	85	87	UQWASC2	N/A	TBC

¹ SIM was measured differently during AMP5

² Our target is to be Upper quartile for water and sewerage companies.

SIM sub measures

Sub measure	2015/16 performance	2016/17 performance	2017/18 performance
SIM quantitative	95	77	71
SIM qualitative	4.27	4.42	4.49
SIM Combined	82	85	87

Performance summary

Our combined SIM score for 2017/18 was 87 representing an increase of two SIM points from 2016/17. Our target for the AMP6 period is to achieve an upper quartile performance level. However, until Ofwat report annual 2017/18 SIM combined performance for all water companies, we are unable to confirm our relative position for 2016/17 or to predict whether we have achieved upper quartile performance.

SIM is assessed based upon the number of contacts and complaints that we receive (Quantitative performance) and the way we respond to these contacts (Qualitative performance).

Quantitative Performance

Complaints: In 2017/18 we received a total of 6,755 complaints which is 9% less complaints than in 2016/17 representing further improvements in overall service.

- Billing has seen a 17% in year improvement with significant reductions in the top 10 complaint areas including moving house, high measured bills and direct debits.
- Wastewater has seen a 7% improvement in complaint volume. In 2016/17 the region experienced significant flash flooding events caused by extreme weather. Whilst we have experienced some major flooding events 2017/18 they have not generated the volume of complaints seen in 2016/17
- Water has seen a 17% increase in complaints mainly due to some large diameter mains bursts and water quality changes in West Cumbria.

There are 13 companies that share their results with each other in advance of them being published by Ofwat. This means that companies can have earlier sight of their relative performance. Based upon the most recent data share, we expect our SIM quantitative performance will be upper quartile compared to the other water and sewerage companies (WASCs).

Unwanted calls: SIM also measures the number of unwanted calls. A call from a customer is classed as unwanted if the caller has experienced some form of aggravation (however mild) and this has prompted them to make contact. In 2017/18 there was a decrease of 5% (9,000 calls) compared to 2016/17. In 2016/17 our total performance for unwanted calls was ranked second of the WASCs behind Anglian and we expect to have performed relatively well in the current year.

Stage 2 complaints: The third aspect of the Quantitative SIM measure is stage 2 complaints. A stage 2 complaint is either a repeat complaint or a complaint that was not dealt with appropriately first time. In 2017/18 we received 186 Stage 2 complaints, a 19% improvement on 2016/17. Stage 2 complaints are running at 2.8% of company complaint volumes, compared to 3.1% in 2016/17.

CCW investigations: SIM also takes account of the number of CCWater investigations. We had no investigations during 2017/18.

Qualitative Performance

2017/18 has seen our best ever SIM qualitative performance, in Wave 4 of 17/18 we were placed 1st of all of the 18 companies with a score of 4.61.

Our average score for 2017/18 was our highest ever at 4.49 (4.27 in 2015/16, and 4.42 in 16/17). We finished the year in third of the 10 WASCs and third when all 18 companies are considered. This was above industry average with all our business areas achieving their internal targets. As can be seen in the table below our scores for the last survey of the year were well above industry average.

2017/18 Qualitative SIM breakdown

	Industry Average for Wave 4	UW Wave 4	Industry Average for 2017/18	UW
Billing	4.52	4.82	4.49	4.60
Water	4.25	4.29	4.26	4.31
Wastewater	4.36	4.52	4.39	4.43
Overall	4.40	4.61	4.40	4.49

Anticipated performance Years 4 and 5

Although we have been making substantial year on year improvements in our SIM performance over recent years, our performance is heavily dependent upon external factors that influence customer perception of the industry as well as internal or operational issues that can directly impact upon customer service and therefore on contact numbers or customer perception.

Therefore, although we expect that the underlying trend in improving performance will continue, it is difficult to predict a score for future years with any confidence.

Penalty or Reward

Any penalties or rewards incurred through SIM will be determined by Ofwat based upon relative intercompany performance for the first four years of the AMP6 period.

This means that performance in 2019/20 will not be included in the assessment, but that Ofwat will be able to finalise the incentive payments in advance of the PR19 final determination.

If Ofwat are to adopt the approach they used at PR14, then based upon current industry performance and trends, we would expect to earn an out performance payment against this measure.

More details of the basis of this payment are set out within our PR14 reconciliation submission which is available on our website.

Line 25 R-A2: Customer Experience Programme

Depreciation	2015/16	2016/17	2017/18	2018/19	2019/20
Target (£m)	1.053	3.370	6.396	10.860	17.769
Actual/Forecast (£m)	0.001	0.363	2.576	6.499	11.968

Overview of the measure

The Customer experience programme (CEP) is a transformational programme delivering new capabilities for the household retail service. The programme was initially assumed to include the following functionality:

- Web contact management system,
- Multi-channel routing,
- Workforce optimisation,
- Analytic capabilities,
- Billing system upgrades,
- Debt management system, and a
- Customer Relationship Management system.

The measure has two components. The first compares actual depreciation incurred on the project against the assumed level of depreciation that would be incurred on the project. With the incentive payment being based upon the total cumulative depreciation at the end of the AMP6 period.

The second assesses whether the programme has been fully delivered by the originally assumed delivery date.

Performance summary

The Customer Experience Programme is designed to improve customer services and to reduce operating costs.

The cumulative depreciation target for this measure was not achieved in 2016/17 due to a change in the nature and expected commissioning of the programme compared to that set out in our PR14 business plan and reflected in the FD.

The early work on this programme resulted in a change in implementation approach, to ensure that the new technology is delivered in a seamless way with no customer impacts.

This revision removed the customer relationship management system (CRM) from the programme, as which was no longer cost beneficial. We have however, made organisational and business process changes, which have enabled many of the original benefits that had been assumed for this system to be delivered.

In 2016/17 the programme achieved a number of key milestones, which helped to improve the customer facing aspects of our operations. These included:

- Delivering a refresh of all our telephony lines, with the new voice of 'Rebecca' conveying a more friendly and helpful tone.
- Replacing our on-hold music and queue messaging to provide useful and relevant information particularly during operational incidents.
- Producing a new suite of customer letters with a refreshed tone of voice; the new letters make it easier for our customers to understand the information following the removal of technical and complex jargon.
- Launching our new customer website which has undergone some transformation and has a very different look and feel to the previous website. Following feedback from customers we made the website easier to navigate as well as reducing the amount of content on the website. Customers can also now access our website on their mobile or tablet.
- Launching our enhanced webchat capability (technology and service), which has simplified webchat functionality and increased webchat service operating hours.

In 2017/18 the programme has delivered further improvements to both non customer facing and customer facing aspects of our operations. These included:

- Introducing the UU mobile App with functionality to make payments, view payment history and submit meter readings. The mobile app now has over 40,000 registered customers.
- Introducing a new version of the My Account customer self-serve portal. This has a comparable look and feel to the website and is formatted for desktop and mobile, tailoring content for each customer. There are now over 500,000 active users of this channel.
- Implementing a new workforce management tool used for forecasting and scheduling agents to work on inbound and outbound calls and back office work. The product has improved both the efficiency of the workforce planning team through better system functionality and reporting and the overall workforce.
- Introducing a new analytics tool which provides customer and performance data that is accessible to operational users and managers to enable business decisions to be taken based on analytic reasoning. The tool provides an insight into customer behaviour and drive decisions and next best actions. Amongst a range of new capabilities the tool for example allows us to provide segmented views of customers such as the Priority Services dashboard below.
- Introducing a number of billing system upgrades to ensure a stable and fully supported platform which negates the need to invest in a new billing system until beyond 2025.

By the end of 2017/18 all systems other than the debt management system (and the de-scoped customer relationship management system) were fully operational.

Anticipated performance Years 4 and 5

We are planning to finalise the upgrade to the debt management system and for this system to be fully operational in late 2018. This would ensure that the programme is fully delivered and operational ahead of the original delivery date.

Partially as a result of the reduction in scope and partially as a result of efficiencies in the programme, the expenditure incurred on the programme and the resultant depreciation will be lower than originally assumed.

Penalty or Reward

The measure is designed to return part of the assumed depreciation to customers based upon two components:

We expect to incur less depreciation than assumed and as a result we will be returning some depreciation to customers via lower bills in AMP7.

Although we will have fully implemented the programme ahead of schedule and have seen the anticipated benefits in terms of customer experience improvements and reductions in cost to serve, we recognise that we have not delivered all of the originally assumed scope of work. We are proposing as part of our PR14 reconciliation submission that the proportion of the assumed depreciation that was associated with the CRM should also be returned to customers.

Full details of the delivery of the customer experience programme and our proposals for how this is reflected through the incentive mechanism in the PR19 process are set out within our PR14 reconciliation submission which is available on our website.

Line 26 R-B1: Customers saying that we offer value for money

15/16 (Actual)	16/17 (Actual)	17/18 (Actual)	17/18 (PC)	17/18 Incentive	Incentive AMP6
50%	52%	52%	51%	Reputational	Reputational

Performance summary

We have met our performance commitment for 2017/18. This is a reputational measure based upon customers' perception of whether we provide them with value for money and has no associated financial out performance payments.

Lessons learnt and action plan

We have undertaken a number of activities during the year to increase visibility and awareness of the services that we provide, such as the increased promotion of our Priority Services schemes, payment assistance schemes and our "Water Efficiency" and "What Not to Flush" campaign. Customer perception scores have improved from last year and we are ahead of our target.

Anticipated performance Years 4 and 5

We expect to maintain performance against this measure, although it is highly sensitive to wider press coverage and recent article on privatisation, company legitimacy and leakage performance in other companies could affect future performance against this measure.

Line 27 B2: Per household consumption

15/16 (Actual)	16/17 (Actual)	17/18 (Actual)	17/18 (PC)	17/18 Incentive	Incentive AMP6
303	305	311	<=289	Reputational	Reputational

Performance summary

We have not met the performance commitment for 2016/17. This is a reputational measure with no associated financial penalty.

Per household consumption for the year is 311 litres per property per day. Although this is higher than our performance commitment, it is in line with Met Office modelling of domestic consumption for 2017/18, which is 4% higher than a normal year (WRMP15 Base Year).

Lessons learnt and action plan

Extensive water efficiency projects are ongoing, where we offer free home visits to install water saving devices.

Anticipated performance Years 4 and 5

Further water efficiency initiatives are ongoing and planned, particularly our project using water data to influence customer behaviour to save water and money. The factors that influence how much water customers use are wide ranging and highly complex, and this measure is difficult to control. Although a number of additional initiatives and trials are being considered there is a risk we won't meet our targets for the next two years.

1.2) Wholesale totex

Background: totex allowances and incentive mechanism

The PR14 process and FD set total expenditure (totex) assumptions for the 2015-20 period for UUW's wholesale water and wholesale wastewater services.

- The total assumed expenditure for the wholesale water service was £2.397 billion (in 12/13 prices)
 - o (£2.356 billion excluding pension deficit recovery costs).
- The assumed expenditure for the wholesale wastewater service was £2.979 billion (in 12/13 prices)
 - o (£2.940 billion, excluding pension deficit recovery costs).

The next price review process in 2019 (PR19) will review how our actual expenditure compared against these PR14 assumptions, with variances against the initial assumptions being accounted for through a totex incentive mechanism. The detail of this mechanism is quite complex, although it is based upon three main principles.

- For incentivisation purposes, all expenditure incurred in the five year period is treated the same whether that expenditure is capital expenditure ("capex") or operating expenditure ("opex").
- Variances to the expenditure levels assumed within the PR14 FD are accounted for by revising the opening regulatory capital value (RCV) for the AMP7 period to reflect actual expenditure levels. An increase in expenditure results in an increase in the RCV.
- Variances to the expenditure levels assumed within the PR14 FD are also accounted for through a pain/gain mechanism, which provides a revenue out performance payments for reductions in expenditure or a revenue penalty for increases in expenditure as part of the PR19 process.

These two processes work together in a way that if we can deliver the programme for a lower level of totex than assumed in the FD then this saving would be shared on a broadly equal basis between customers and the company. Equally, if we found that we needed to spend more money than was allowed at PR14, then both the company and customers would contribute towards this additional expenditure, again on a broadly equal basis.

Some costs, including compensation payments and pension deficit recovery costs, are excluded from this incentive mechanism, which means that any increase in company expenditure would not be shared with customers. The remaining costs are subject to the cost sharing incentive mechanism, and are described in the PR14 FD and the APR pro forma tables as "menu costs". Details of how the totex incentive mechanism operates is set out within our PR14 reconciliation submission which is published on our website.

2017/18 and AMP6 cumulative expenditure to date

Totex expenditure in 2015/16, 2016/17 and to a lesser extent in 2017/18 was significantly higher than assumed in either the PR14 FD or in our PR14 business plan. 2017/18 expenditure in Water was in excess of the FD whereas 2017/18 Wastewater expenditure was lower than the FD assumption. The cumulative Wastewater position remains significantly higher than the FD.

The key reason for this increased expenditure is because we have chosen to accelerate our expenditure programme, to help to secure the performance improvements required to meet the challenges of our AMP6 outcomes and to secure longer term operational efficiencies.

Between our initial PR14 business plan and our final PR14 proposals we set ourselves a challenge to drive out a further £400 million from our costs, with the FD setting a further challenge to meet the assumed costs.

In our previous Annual Performance Reports we set out that we had developed an outline plan to meet the efficiency challenge set by the FD. During 2017/18 we have continued to work on improving the efficiency of our operations and to assess how this efficiency can be embedded and built on for our upcoming PR19 business plan. Our approach to efficiency can be considered in three main areas:

- **Challenging Scope:** We have introduced a risk and value assessment for all our major projects. This assessment process uses a series of challenge sessions, before and during the project lifecycle, to ensure that issues are analysed thoroughly and that the right decision is always taken to ensure that best value is achieved. We are also working actively with regulators to assess and manage requirements and working with external partners to deliver better outcomes through innovative or catchment wide solutions.
- **Driving Innovation:** Innovation is a core value at United Utilities, with this being recognised in our world class status in the Dow Jones Sustainability Index. We utilise a structured innovation assessment process to help to ensure that innovation is part of the culture in the way that we develop our solutions and operate our business.
- **Reducing Price:** We have revised our model for capital delivery, procuring new design and build partners to help improve our capital efficiency through a combination of earlier engagement, solution innovation and reduced contract prices. This has seen us achieve cost savings in excess of 10% when compared to our AMP5 costs. We will continue to build on this approach and have developed and implemented a best in class procurement mechanism that allows us to identify and select the appropriate way to test our costs, which will ultimately lead to more cost efficient arrangements going forward.

As a consequence of this work we have further reduced the delivery risks associated with this programme.

As set out in the Executive Summary of this report and detailed within Section 2 (Regulatory Accounts), we are performing well on the way that we have been able to finance our operations. In 2016/17 we committed to invest some of this out performance in a £100 million programme of resilience work, designed to provide additional customer and environmental benefits both over the rest of the AMP and in the longer term. We are now committed to increase this spend on resilience to £250 million.

A comparison of our actual wholesale expenditure in 2017/18 against the expenditure levels assumed in the PR14 FD, together with an explanation of the variances, is set out below.

Comparison of actual totex to FD assumed totex

APR Pro forma Table 4D and 4E (see Section 2.5) are the key tables which set out the build-up of our 2017/18 totex expenditure within the wholesale water and wholesale wastewater services. The expenditure within these tables is then summarised within **Pro forma Table 2B** (see Section 2.3).

Infrastructure capital maintenance expenditure (IRE) is included as operating expenditure, on line 5 of Table 2B. In our original PR14 business plan and in the FD, IRE was included as a separate capital expenditure line. However, as totex assumptions are set as a combined aggregate value - rather than as separate capex and opex allowances - this change in allocation does not impact upon the overall totex variance, or upon any PR19 incentive calculations.

Table 2B splits the water service expenditure between water resources and network plus and splits the wastewater services expenditure between bio resources and network plus. This breakdown reflects the price control split which will be adopted for PR19. The split of expenditure between the two water and the two wastewater categories will not impact upon AMP6 incentives.

APR Pro forma Table 4B (see Section 2.5) consolidates the expenditure from Table 2B to produce water and wastewater totals, removing the items excluded from the menu to produce an adjusted actual totex level. It then deflates this to produce adjusted actual totex expenditure at base year prices, which can be compared to the allowed totex in the FD.

Variance between allowed totex and actual totex from Tables 4B (12/13 prices)

	2017/18		Cumulative	
	Water £m	Wastewater £m	Water £m	Wastewater £m
Allowed totex	470.6	627.3	1,388.4	1,755.0
Actual totex	518.4	619.3	1,528.0	1,924.2
Increase / (decrease) in expenditure	+47.8	-8.0	+139.6	+169.2

Comparison between the actual totex and the assumed totex needs to take account of the fact that the actual expenditure is accounted for on a principal use basis whereas the expenditure assumed in the FD was derived on a proportional allocation basis.

Principal use accounting means that actual expenditure on assets that are used by more than one service (for example IT systems), is now included within the service that is the principal user of that asset, with subsequent recharges to other services that use that asset.

In the final determination this expenditure was proportionately allocated between all the services that would use the asset. Principal use allocation has increased the reported spend in wastewater and reduced the reported spend in water.

Totex variance analysis

The variance between the actual level of totex incurred and the level of totex assumed in the FD is due to a number of factors.

The outcome based regulatory framework is designed to incentivise companies to innovate and revise their plans and outputs, where this is beneficial. As such there have been substantial changes to the detailed scope and timing of work that we will have already delivered and are planning to deliver in the period. Most of these changes are designed to deliver the same outcomes, but in a more effective way.

It is useful to assess the changes to the programme in three broad areas - changes in scope, changes in timing and efficiency. The exact split between these three areas is dependent upon a number of factors including assumptions about future years' risks and efficiencies. As such the following assessment provides a relatively high level view of the scale of the movements in each of these three areas.

Changes in scope

For the purposes of this assessment we have considered changes in scope to be our forecast resilience spend, with all other expenditure being assumed to comply with the commitments we made during PR14.

Of the £250 million of resilience expenditure which we now intend to spend during this AMP, £100 million has been spent to date, of which £93 million is in Water.

Changes in timing

We have chosen to accelerate many of our investment programmes and have invested substantially in information and operational technologies to help secure the early performance improvements and risk reduction initiatives that are required to meet our outcome delivery and efficiency targets.

On an equivalent basis and excluding the additional scope of the resilience spend, discussed above, we have accelerated approximately £290 million of expenditure into the first three years of the AMP6 period. More than two thirds of this accelerated expenditure is allocated to wastewater services on a principal use basis.

Efficiency

For the purposes of this assessment we have included all cost reduction activities within this category. These range from individual project level cost efficiencies to strategic revisions to our approach to delivering our outcomes. We have also included additional costs arising from changes in scope required to allow us to fully comply with our obligations as factors that have reduced the overall efficiency with which we have delivered the programme.

Our original PR14 business plan contained substantial efficiency challenges designed to reduce our costs to upper quartile efficiency levels, with further efficiency challenges being set by the FD. In total this required us to make efficiency savings of over £400 million to deliver our programmes of work for the costs allowed in the FD.

Our analysis has shown that we should be able to meet the original £400 million plus efficiency challenge and to be able to drive out sufficient additional efficiency. This should allow the revised scope of work which we are now implementing (excluding our proposed £250 million of additional investment on resilience) to be delivered for £100 million less than the total level of expenditure assumed in the FD. Net efficiency savings are expected to be spread evenly across all years of the AMP, and approximately three quarters of the net efficiency out performance is expected to be in Wastewater.

The variance between the cumulative FD assumed totex for the water service (on a principal use basis) is approximately £150 million on an outturn basis. Taking into account the £90 million of resilience spend to date, and £70 million of acceleration, shows that an overall programme level net efficiency of approximately £10 million has been achieved to date. This value is over and above the efficiency targets set by the FD.

The cumulative variance for the wastewater service is approximately £180 million on an outturn basis. Taking into account the £10 million of resilience spend to date and the £220 million of acceleration, shows an overall programme level net efficiency position of approximately £50 million, over and above the efficiency targets set by the FD.

Excluded Costs

The costs excluded from the totex incentive assessment as reported in Pro forma Table 4B comprise three main components:

- Pension deficit recovery costs. Ofwat included some costs within price limits to contribute toward pension deficit recovery costs that most companies are facing. UUW has contributed more to close the deficit than was assumed in price limits and now has a relatively well-developed and funded plan agreed by management and shareholders to deal with pension deficits.
- Third party costs, which are broadly in line with expectations
- Other costs, which are made up from two main elements
 - o “transition expenditure” (expenditure incurred in AMP5 on AMP6 outputs), which is displayed as a negative value in APR Table 4B and is slightly lower than assumed in the FD due to exclusion of costs in 2013/14, and
 - o Compensation and other guaranteed standards scheme payments, which mainly as a consequence of the 2015/16 water quality incident have more than offset the water service transition expenditure to result in a net positive exclusion.

Impact of expenditure on the RCV

APR Pro forma Table 4C sets out the 2017/18 RCV determined at the PR14 FD and shows the implied revisions to this position as a result of the impact of totex over or underspend and net out performance payments incurred through the outcome delivery incentives .

The RCV will be fully reassessed as part of the PR19 process with the value presented in Table 4C being referred to as a “shadow RCV”. As can be seen in Table 4C the projected shadow RCV is £204 million higher than the RCV determined at the FD.

The increase in totex expenditure in the first three years of the period has resulted in an increase to the water service shadow RCV of £59 million and an increase in the wastewater service shadow RCV of £110 million. The net out performance payments received for the wastewater ODIs has resulted in the additional increase of £35 million to the wastewater shadow RCV. There has been a net penalty for the water service ODIs which has no impact upon the RCV.

¹ ODI penalties result in revenue reductions at PR19, whereas rewards result in RCV adjustments.

It should be noted that if expenditure levels over the full five year period are in line with FD assumptions then the current uplift to the RCV as a result of expenditure would reduce over the next two years.

Similarly the ODI impacts would only apply based upon five year performance and many of the targets for our ODIs become tougher through the AMP. As such, if penalties are incurred against the wastewater ODIs in the remaining years of the period, then the uplift to the RCV would be removed.

Unit cost analysis of our expenditure

APR Tables 4D and 4E analyse the wholesale water and wastewater totex by the type of investment that has been incurred (e.g. power, capital maintenance etc.) and by the operating unit that this expenditure has been incurred on (e.g. raw water transport, water treatment etc.).

The operating expenditure within this table is then divided by a “cost driver” for each operating unit to determine a unit cost measure for each operating unit.

Whilst in theory these unit costs should be comparable between companies, it is worth noting that there was significant variation between the values reported by some companies in last year’s Annual Performance Report.

Differences between companies may reflect a number of factors including different asset configurations and performance requirements, different allocation of expenditure (such as IRE) and differing assumptions on cost allocations between operating units, as well as relative efficiency. These factors - together with differing capitalisation policies² and year on year cost variances - make meaningful comparisons between companies difficult.

² UUW’s 2017/18 upstream services methodology and accompanying commentary are published on our website

1.3) Wholesale revenue and current cost financial performance

APR pro forma Table 2I, (see section 2.3) sets out the build-up of the wholesale revenue for 2017/18 and the variance compared with the level of revenue assumed in the FD.

The total revenue set by the wholesale price controls for recovery in 2017/18 was £1,619.2 million. This was made up of £1,595.0 million wholesale revenue, plus £24.2 million in grants and contributions. The level of revenue recovered in the year was lower (£10.8 million) than the £1,630.0 million assumed in the PR14 FD, but was higher (£3.1 million) than the £1,616.1 million of revenue assumed after taking into account the 2015/16 WRFIM adjustment of £13.9 million.

Relative to the price review assumptions, revenue reductions were due to lower numbers of commercial connections, and an increase in domestic allowances as a result of one off residency validation activity undertaken during the year. Revenue increases in the year were the result of factors including customer consumption being higher than forecast, increased grants and contributions mainly due to increases in volumes of connections and infrastructure charges and as a result of increased volumes within household connections and infrastructure.

APR pro forma Table 4A, (see section 2.5) provides additional information on household numbers and volumes. Distribution input increased slightly from 1,730.6 MI/d in 2016/17 to 1,769.0 MI/d in 2017/18. Volumes of bulk supplies exported and imported remained reasonably consistent in 2016/17 and 2017/18, with circa 13 MI/d exported and 0.7 MI/d imported in 2017/18.

In line with the RAGs for 2017/18 we have reported sewer adoptions and sewer connections fee income (£2.3 million) as price control revenue, but this income was not included in the revenue control set at PR14 and therefore we will be excluding it from the WRFIM for the purposes of setting charges. This approach means that we will be both compliant with the change in regulatory reporting introduced in 2017/18 and also able to continue to recover revenue under the revenue control in line with the approach that underpinned the PR14 final determination.

APR pro forma Table 4G (see section 2.5) summarises the wholesale current cost financial performance for 2017/18. The table has three sections:

Lines one to five add the non-price control revenue of £3.9 million (Table 2A) to the wholesale revenue (£1,595.0 million) to produce a total revenue of £1,598.9 million. It then subtracts operating expenditure, capital maintenance charges and other operating income to generate a wholesale current cost operating profit of £509.2 million.

Lines six to ten add other income (including grants and contributions) and interest income and subtracts interest expense from the current cost operating profit to produce a current cost profit before tax and fair value movements of £251.2 million.

Lines eleven and twelve adjust the current cost profit before tax and fair value movements to take account of fair value gains on financial instruments, to produce a current cost profit before tax value of £278.4 million.

Wholesale current cost operating profit was £38 million higher than in 2016/17. This was mainly due to the increased wholesale revenues in 2017/18. Current cost profit before tax and fair value movements was £17 million lower in 2017/18 due mainly to the increased interest expense, while there was a £5 million increase in current cost profit before tax due to a change in the level of fair value gains/losses on financial instruments in each year.

1.4) Retail expenditure and revenues

Household retail

Background

The household retail price control is designed to allow companies to recover sufficient revenue from household customers to fund the average costs of operating a retail business. This is known as “the cost to serve”.

For companies whose historic and forecast costs were above industry average, allowed costs were set using a glide path over a three-year period to reduce from forecast cost to serve levels to average cost to serve levels.

A specific cost uplift was allowed for UUW to reflect the higher costs of operating in the North West of England as a consequence of the relatively high levels of deprivation in the region. Additional costs were also allowed to reflect the company’s proposals to implement a new IT led Customer Experience Programme. These new IT depreciation costs are subject to a specific outcome delivery incentive mechanism, which was designed to ensure that if this expenditure is not incurred, or the outcome of the programme is not delivered, then these costs will be returned to customers through the PR19 process.

Separate annual cost to serve allowances were defined at PR14 for metered and unmetered customers and dual (both water and wastewater) and single (water or wastewater only) service customers. Total revenue allowances were determined by multiplying these cost to serve allowances by the assumed customer numbers within each category and applying a margin defined as part of the price review.

The cost to serve incentive mechanism has three main principles;

- Initial cost to serve allowances are fixed and do not increase year on year to reflect inflation.
- The allowances fund all retail operating costs, including depreciation on new capital expenditure. Expenditure for demand side water efficiency and customer side leak repairs is also included where the activity is not for wholesale purposes.
- Any over or underspend against the cost to serve allowed is paid for or retained wholly by the company and will not affect future customer bills.

2017/18 performance

We recognise and have acted upon the challenge set by the PR14 determination. As described in Section 1.1 Outcome Delivery, we have made a step change in our customer service over recent years and have plans in place to deliver further improvements to our cost to serve during the remaining years of the AMP6 period.

We are reducing our expenditure per customer year on year, focussing on three main areas; driving operational efficiency, improving debt management and making greater use of affordability solutions. In 2016/17 we significantly reduced our cost to serve and maintained our position as the 7th ranked WASC (out of 10). We have reduced our costs further during 2017/18 as we continue our glide path to reduce Cost to Serve to that allowed at PR14 by 2019/20 .

Our 2017/18 household retail operating costs and revenues are set out in APR pro forma Tables 2C and 2F (Section 2.3), with pro forma Table 4F (Section 2.5) analysing these costs by the type of retail service provided (dual/single and metered/un-metered).

Improving operating costs and efficiency

We have implemented a number of initiatives to reduce our operating costs, these include

- reducing overheads;
- improving operational performance;
- proactively informing customers of known network issues and their resolution, to reduce inbound customer contacts;
- increased digital penetration; and,
- benefits achieved through re-designing of bills and customer literature.

APR Tables 2C and 4F show that total household retail operating costs in 2017/18 were £113.6 million. This figure is £0.9 million below the costs we incurred in 2016/17. It is higher than the operating costs of £108.8 million assumed in the PR14 FD, mainly due to changes to the Regulatory Accounting Guidelines (as defined in paragraph 2.3 of RAG 2) regarding the accounting for the depreciation of legacy assets. This has resulted in additional depreciation and amortisation charges of legacy assets to household retail of £4.5 million for which there was no allowance within the retail price control.

Improving debt management

UW has a higher bad debt cost than the majority of the industry. Deprivation levels are the principal driver of our higher than average bad debt with the North West having a substantially higher proportion of customers impacted by welfare reform and claiming universal credits.

Recognising this challenge, debt and cash collection remains a priority for us. In 2014/15 Household bad debt costs were running at 6.3% of regulated revenue. Since this time we have maintained a clear focus on improving our bad debt and cash collection performance. This has included the establishment of a number of new initiatives, such as our “better billing” initiative and has involved working with Equifax to identify which customers are likely to be in a financially challenging situation and which customers are able to pay their water bill but need further encouragement and engagement in order to prompt them to do so.

In 2017/18 we have seen a significant uptake in the number of customers taking advantage of our financial assistance schemes with a consequent benefit on bad debt. This has been supported by the continued success of our Town Action Planning initiative which engages with customers in our most deprived areas. To date 46% of contacts under the initiative have had positive outcomes and 70% of customers moved onto a payment plan remain on it. This initiative recently resulted in us receiving Highly Commended in the category for “Excellence in Treating Customer Vulnerability” at the Credit Awards, having won this award in the previous year. This is a cross sectoral awards scheme which benchmarked our approach against initiatives in other industries, beyond the water sector. Our current performance indicates that we will have more than double the number of customers on payment assistance schemes by the end of the AMP period than was assumed at the time of the FD.

Our bad debt performance has also benefitted from the sustained improvement in our cash collection performance since 2015/16 which has resulted in a cleaner debt book. We have focussed on more dynamic targeting of debt collection activities, and have invested in testing and improving our innovative data led collections strategies.

Through increased use of financial assistance schemes to support those customers that can't pay and a more robust approach to those customers that won't pay, household bad debt performance for 2017/18 demonstrates sustained improvement and has improved to 4.2% of regulated revenue, with our bad debt charge having reduced to £50 million.

Our continued improved performance this year has been encouraging but bad debt will remain a challenge in our region of high deprivation and so will be an area of continued focus as we drive for further improvement.

Greater use of affordability solutions

We have increased the reach of our financial assistance schemes and are now planning to reach more than double the number of customers we had originally forecast in our PR14 business plan. We originally anticipated that we would be able to help 51,000 customers through these schemes, whereas we already have 100,000 customers on financial assistance schemes and plan to increase this to 117,000 by the end of the five year period.

We have driven up the number of customers eligible for financial assistance schemes, through a range of initiatives. We are making active use of customer segmentation data to increase the penetration of our assistance schemes in more deprived areas. In addition we also have over 35,000 customers who now pay via the Department of Work and Pensions (DWP) and are proposing further data sharing with the DWP which could help further.

The penetration and conversion of customers onto affordability solutions does impact in year revenues, but it is a key factor in reducing the amount of bad debt that we are carrying and in supporting our drive to continue to reduce our cost to serve.

Revenue

APR pro forma Table 2F (see Section 2.3) shows that total household retail revenue in 2017/18 was £111.4 million. This figure is £10.7 million lower than in 2016/17 and £10.0 million less than the revenue, including margin, assumed in the PR14 FD, which was £121.4 million. The reduced revenue compared to the PR14 FD is due to the impact of our social and support tariffs.

Actual customer numbers at 2.98 million, were 3,391 higher than in 2016/17 and 15,160 higher than assumed in the PR14 FD. This was mainly due to property classification changes that were made in readiness for non-household retail competition. Changes in domestic void levels are largely due to one off residency validation activities undertaken over the past two years. This data cleansing activity, supported by Credit Reference Agency datasets, has helped validate household billing records, and resolve instances where incorrect or out dated occupier identity information was held.

Operating profit

APR pro forma Table 2A (see Section 2.3) shows the operating profit for UUK's four price controls. For the household retail price control operating profit before recharges in 2017/18 (retail revenues minus operating costs) was a £2.2 million loss. This is lower than the profit assumed in the FD, mainly due to increased support for customers on social and support tariffs.

Pro forma Table 2A also reports operating profit after recharges. This value, a £6.4 million loss, is lower than operating profit, because principal use asset recharges to household retail were £4.2 million higher than recharges from household retail.



2. Regulatory Accounts for the 12 months ended 31 March 2018

2.1) Introduction

The Regulatory Accounts have been prepared in accordance with the requirements of Regulatory Accounting Guidelines (RAGs) 1.08, 2.07, 3.10, 4.07 and 5.07 issued by the Water Services Regulation Authority (WSRA or Ofwat). These are separate from the statutory financial statements which have been prepared under the basis of International Financial Reporting Standards as adopted for use in the European Union.

The directors, in accordance with RAG 3.10 have prepared a historical cost income statement and historical cost statement of financial position, both of which separately show the figures for the appointed business and the non-appointed business. A historic cost cash flow statement has also been prepared in line with the Ofwat guidelines.

On 1st April 2017, United Utilities Water Limited (UUW) formally exited the non-household retail market. This followed the transfer of UUW's non-household retail operations to Water Plus Group Limited (Water Plus), a joint venture between United Utilities PLC and Severn Trent PLC, on 1st June 2016. Following the transfer, Water Plus continued to collect outstanding debt on UUW's behalf until all debt was sold to Water Plus, and the associated provisions closed out, during 2017/18. In addition, a small number of activities required to be reported as non-household under the RAGs, such as developer services administration costs, remain with UUW and the revenues and costs associated with these activities are still included within these regulatory accounts.

Statement of directors' responsibilities for regulatory information

Further to the requirements of company law, the directors are required to prepare accounting 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 Ofwat.

This additionally requires the directors to:

- a) Confirm that, in their opinion, the company has sufficient financial resources and facilities, management resources and systems of planning and internal control for the next 12 months.

The directors have issued a certificate under Condition F6A of the Licence - see page 166.

- b) Confirm that, in their opinion, the company has contracts with any associate company with the necessary provisions and requirements concerning the standard of service to be supplied to ensure compliance with the company's obligations as a water and sewerage undertaker.

The directors have issued a certificate under Condition F6A of the Licence - see page 166.

- c) Report to Ofwat changes in the company's activities, which may be material in relation to the company's ability to finance its regulated activities.

The directors hereby confirm that there were no changes in the company's activities, which may be material in relation to the company's ability to finance its regulated activities, during the year ended 31 March 2018.

- 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.

This has been confirmed within 'Information in respect of transactions with any other business or activity of the appointee or any associated company' on pages 156-158.

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

The directors of the company hereby confirm that the company has kept proper accounting records, which comply with Condition F.

These responsibilities are additional to those already set out in the United Utilities Water Limited statutory financial statements.

The contract of appointment with the auditor satisfies the requirements of paragraph 9.2 of Condition F of the Licence, namely that 'the auditor will provide such further explanation or clarification of its reports, and such further information in respect of the matters which are the subject of its reports, as the Water Services Regulation Authority may reasonably require'.

In addition, paragraph 3.1 of Condition K of the Instrument of Appointment requires directors to 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.

In the opinion of the directors, the company was in compliance with paragraph 3.1 of Condition K at the end of the financial year and this has been confirmed in the certificate on page 167 of the regulatory accounts.

Disclosure of information to the auditor

Each of the persons who is a director at the date of approval of this report confirms that:

1. so far as he or she is aware, there is no relevant information of which the company's auditor is unaware; and
2. he or she 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.

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

Approved by the Board and signed on its behalf by:

Russ Houlden
Chief Financial Officer

12 June 2018

2.2) Independent auditors' report to the Water Services Regulation Authority (the "WSRA") and Directors of United Utilities Water Limited

Opinion

We have audited the sections of/tables within United Utilities Water Limited's Regulatory Accounts for the year ended 31 March 2018 ("the Regulatory Accounts") which comprise:

- the regulatory financial reporting tables comprising the income statement (table 1A), the statement of comprehensive income (table 1B), the statement of financial position (table 1C), the statement of cash flows (table 1D) 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 tangible fixed assets for wholesale and retail (table 2D), the analysis of 'grants and contributions' and land sales for wholesale (table 2E), the household water revenues by customer type (table 2F), the non-household water revenues by customer type (table 2G), the non-household wastewater revenues by customer type (table 2H), the revenue analysis & wholesale control reconciliation (table 2I), the infrastructure network reinforcement costs (table 2J) and the related notes.

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

In our opinion, United Utilities Water Limited's Regulatory Accounts have been properly prepared in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA (RAG 1.08, RAG 2.07, RAG 3.10, RAG 4.07 and RAG 5.07) the accounting policies set out on pages 143 to 147 and the company's accounting methodology statement, as defined in RAG 3.10, appendix 2.

Basis for opinion

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

Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the Regulatory Accounts section of our report. We have fulfilled our ethical responsibilities under, and are independent of the company in accordance with, UK ethical requirements under the FRC Ethical Standard. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter – special purpose basis of preparation

We draw attention to the fact that the Regulatory Accounts have been prepared in accordance with Condition F, the Regulatory Accounting Guidelines, the company's 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 Accounts are separate from the statutory financial statements of the Company and has not been prepared under the basis of International Financial Reporting Standards as adopted by the European Union ("IFRSs"). Financial information other than that prepared on the basis of IFRSs does not necessarily represent a true and fair view of the financial performance or financial position of a company as shown in statutory financial statements prepared in accordance with the Companies Act 2006.

The Regulatory Accounting Statements on pages 128-142 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 Accounts are prepared in accordance with a special purpose framework for the specific purpose as described in the Responsibilities for the Regulatory Accounts and the audit section below. As a result, the Regulatory Accounts 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 Accounts is not appropriate; or
- the directors have not disclosed in the Regulatory Accounts 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 Accounts 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.

Reporting on other information

The other information comprises all of the information in the Regulatory Accounts other than the Regulatory Accounting Statements within the Regulatory Accounts and our auditors' report thereon. The directors are responsible for the other information. Our opinion on the Regulatory Accounting Statements does not cover the other information and, 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 within the Regulatory Accounts 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 for the Regulatory Accounts

As explained more fully in the Statement of Directors' Responsibilities set out on pages 122-123, the directors are responsible for the preparation of the Regulatory Accounts in accordance with Condition F, the Regulatory Accounting Guidelines issued by the WSRA, the Company's accounting policies set out on pages 143-147, and the Company's 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 Accounts that are free from material misstatement, whether due to fraud or error.

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

Auditors' responsibilities for the Audit of the Regulatory accounting statements within the Regulatory Accounts

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

As part of an audit in accordance with ISAs (UK), we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the company's Regulatory Accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during the audit.
- Assess the reasonableness of significant accounting estimates and related disclosures made by the directors.

We have not assessed whether the accounting policies are appropriate to the circumstances of the Company where these are laid down by Condition F. Where Condition F does not give specific guidance on the accounting policies to be followed, our audit includes an assessment of whether the accounting policies adopted in respect of the transactions and balances required to be included in the Regulatory Accounts are consistent with those used in the preparation of the statutory financial statements of the company.

The Company has presented the allocation of operating costs and assets in accordance with the accounting policy for price control segments set out in the notes on pages 143-147 and its accounting methodology statement. We are not required to assess whether the methods of cost allocation set out in the accounting methodology statement are appropriate to the circumstances of the Company or whether they meet the requirements of the WSRA, which would have been required if we were to express an audit opinion under International Standards on Auditing (UK).

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 Regulatory Accounts.

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 Regulatory Accounts 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 12 June 2018, which are prepared for a different purpose. Our audit report in relation to the statutory financial statements of the Company (our “Statutory audit report”) 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.

William Meredith
For and on behalf of KPMG LLP

Chartered Accountants
1 St Peter’s Square
Manchester
M2 3AE

12 June 2018

Pro forma 1B Statement of comprehensive income

For the 12 months ended 31 March 2018

Line description	Units	DPs	Statutory	Adjustments			Total appointed activities
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments	
1B.1 Profit for the year	£m	3	339,226	-31,815	5,016	-36,831	302,395
1B.2 Actuarial gains/(losses) on post employment plans	£m	3	34,579	0,000	0,000	0,000	34,579
1B.3 Other comprehensive income	£m	3	-5,859	0,000	0,000	0,000	-5,859
1B.4 Total Comprehensive income for the year	£m	3	367,946	-31,815	5,016	-36,831	331,115

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma 1C Statement of financial position

For the 12 months ended 31 March 2018

Line description	Units	DPs	Statutory	Adjustments			Total appointed activities	
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments		
A	Non-current assets							
1C.1	Fixed assets	£m	3	10738.859	-138.377	1.553	-139.930	10598.929
1C.2	Intangible assets	£m	3	197.739	-6.523	3.194	-9.717	188.021
1C.3	Investments - loans to group companies	£m	3	0.000	0.000	0.000	0.000	0.000
1C.4	Investments - other	£m	3	0.142	0.000	0.000	0.000	0.142
1C.5	Financial instruments	£m	3	297.758	0.000	0.000	0.000	297.758
1C.6	Retirement benefit assets	£m	3	264.100	0.000	0.000	0.000	264.100
1C.7	Total non-current assets	£m	3	11498.599	-144.900	4.747	-149.647	11348.951
B	Current assets							
1C.8	Inventories	£m	3	8.115	0.000	0.000	0.000	8.115
1C.9	Trade & other receivables	£m	3	398.029	-19.648	2.189	-21.837	376.192
1C.10	Financial instruments	£m	3	218.481	0.000	0.000	0.000	218.481
1C.11	Cash & cash equivalents	£m	3	499.567	40.000	0.000	40.000	539.567
1C.12	Total current assets	£m	3	1124.192	20.352	2.189	18.163	1142.356
C	Current liabilities							
1C.13	Trade & other payables	£m	3	-262.513	-2.727	-0.743	-1.985	-264.498
1C.14	Capex creditor	£m	3	0.000	0.000	0.000	0.000	0.000
1C.15	Borrowings	£m	3	-817.399	141.567	0.000	141.567	-675.832
1C.16	Financial instruments	£m	3	-4.201	0.000	0.000	0.000	-4.201
1C.17	Current tax liabilities	£m	3	-1.333	0.000	-1.177	1.177	-0.156
1C.18	Provisions	£m	3	-20.363	-8.840	0.000	-8.840	-29.203
1C.19	Total current liabilities	£m	3	-1105.808	130.000	-1.919	131.919	-973.889
1C.20	Net current assets / (liabilities)	£m	3	18.384	150.352	0.269	150.083	168.467
D	Non-current liabilities							
1C.21	Trade & other payables	£m	3	-642.033	616.988	0.000	616.988	-25.044
1C.22	Borrowings	£m	3	-7302.483	0.000	0.000	0.000	-7302.483
1C.23	Financial instruments	£m	3	-96.830	0.000	0.000	0.000	-96.830
1C.24	Retirement benefit obligations	£m	3	0.000	0.000	0.000	0.000	0.000
1C.25	Provisions	£m	3	0.000	0.000	0.000	0.000	0.000
1C.26	Deferred income - G&C's	£m	3	0.000	-229.154	0.000	-229.154	-229.154
1C.27	Deferred income - adopted assets	£m	3	0.000	-387.834	0.000	-387.834	-387.834
1C.28	Preference share capital	£m	3	0.000	-130.000	0.000	-130.000	-130.000
1C.29	Deferred tax	£m	3	-1078.064	24.185	0.000	24.185	-1053.880
1C.30	Total non-current liabilities	£m	3	-9119.410	-105.815	0.000	-105.815	-9225.226
1C.31	Net assets	£m	3	2397.572	-100.363	5.016	-105.379	2292.193
E	Equity							
1C.32	Called up share capital	£m	3	-100.000	0.000	0.000	0.000	-100.000
1C.33	Retained earnings & other reserves	£m	3	-2297.572	100.363	-5.016	105.379	-2192.193
1C.34	Total Equity	£m	3	-2397.572	100.363	-5.016	105.379	-2292.193

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma 1D Statement of cash flows

For the 12 months ended 31 March 2018

Line description	Units	DPs	Statutory	Adjustments			Total appointed activities	
				Differences between statutory and RAG definitions	Non-appointed	Total adjustments		
A Statement of cashflows								
1D.1	Operating profit	£m	3	634.189	-27.753	3.936	-31.689	602.501
1D.2	Other income	£m	3	0.000	19.467	2.257	17.210	17.210
1D.3	Depreciation	£m	3	375.309	-4.109	0.087	-4.196	371.113
1D.4	Amortisation - G&C's	£m	3	-6.387	6.387	0.000	6.387	0.000
1D.5	Changes in working capital	£m	3	26.904	6.007	-0.440	6.448	33.352
1D.6	Pension contributions	£m	3	-29.521	0.000	0.000	0.000	-29.521
1D.7	Movement in provisions	£m	3	-2.518	0.000	0.000	0.000	-2.518
1D.8	Profit on sale of fixed assets	£m	3	6.410	0.000	0.001	-0.001	6.409
1D.9	Cash generated from operations	£m	3	1004.387	0.000	5.841	-5.841	998.545
1D.10	Net interest paid	£m	3	-146.243	0.000	0.000	0.000	-146.243
1D.11	Tax paid	£m	3	-35.455	0.000	-0.227	0.227	-35.228
1D.12	Net cash generated from operating activities	£m	3	822.689	0.000	5.614	-5.614	817.075
C Investing activities								
1D.13	Capital expenditure	£m	3	-726.738	0.000	0.000	0.000	-726.738
1D.14	Grants & Contributions	£m	3	23.731	0.000	0.000	0.000	23.731
1D.15	Disposal of fixed assets	£m	3	1.440	0.000	0.000	0.000	1.440
1D.16	Other	£m	3	-0.008	0.000	0.000	0.000	-0.008
1D.17	Net cash used in investing activities	£m	3	-701.575	0.000	0.000	0.000	-701.575
1D.18	Net cash generated before financing activities	£m	3	121.114	0.000	5.614	-5.614	115.500
D Cashflows from financing activities								
1D.19	Equity dividends paid	£m	3	-316.670	0.000	-5.614	5.614	-311.056
1D.20	Net loans received	£m	3	512.974	0.000	0.000	0.000	512.974
1D.21	Cash inflow from equity financing	£m	3	0.000	0.000	0.000	0.000	0.000
1D.22	Net cash generated from financing activities	£m	3	196.304	0.000	-5.614	5.614	201.919
1D.23	Increase (decrease) in net cash	£m	3	317.418	0.000	0.000	0.000	317.418

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For line definitions see Excel version of the data tables

Pro forma 1E Net debt analysis at 31 March 2018

For the 12 months ended 31 March 2018

Line description	Units	DPs	Interest rate risk profile				
			Fixed rate	Floating rate	Index linked	Total	
1E.1	Borrowings (excluding preference shares)	£m	3	2434.894	1376.747	3720.225	7531.867
1E.2	Preference share capital	£m	3				130.000
1E.3	Total borrowings	£m	3				7661.867
1E.4	Cash	£m	3				-0.067
1E.5	Short term deposits	£m	3				-539.500
1E.6	Net Debt	£m	3				7122.300
1E.7	Gearing	%	2				64.69%
1E.8	Adjusted gearing	%	2				62.04%
1E.9	Full year equivalent nominal interest cost	£m	3	96.370	4.082	172.071	272.523
1E.10	Full year equivalent cash interest payment	£m	3	96.370	4.082	47.675	148.128
A	Indicative interest rates						
1E.11	Indicative weighted average nominal interest rate	%	2	3.09%	n/a	4.63%	3.56%
1E.12	Indicative weighted average cash interest rate	%	2	3.09%	n/a	1.28%	1.94%
1E.13	Weighted average years to maturity	nr	2	5.19	n/a	18.89	12.35

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For line definitions see Excel version of the data tables

Pro forma tables Section 2 Price review and other segmental reporting

Pro forma 2A Segmental income statement

Additional commentary on the Section 2 pro forma tables is provided in Section 2.5 Additional unaudited regulatory information.

For the 12 months ended 31 March 2018

Line description	Units	DPs	Retail		Wholesale						Total	
			Household	Non-Household	Water resources	Water Network+	Water Total	Waste water Network+	Sludge	Wastewater total		
2A.1 Revenue - price control	£m	3	111.393	0.347			719.641	719.641	875.376		875.376	1706.757
2A.2 Revenue - non price control	£m	3	0.000	0.000			3.411	3.411	0.465		0.465	3.876
2A.3 Operating expenditure	£m	3	-106.172	5.866								
2A.4 Depreciation - tangible fixed assets	£m	3	-1.995	0.000	-58.356	-278.048	-336.404	-257.413	-36.487	-293.901	-730.610	
2A.5 Amortisation - intangible fixed assets	£m	3	-5.453	0.000	-8.008	-116.008	-124.016	-178.120	-39.173	-217.293	-343.304	
2A.6 Other operating income	£m	3	0.000	0.000	-0.020	-5.719	-5.739	-16.410	-0.206	-16.616	-27.808	
2A.7 Operating profit before recharges	£m	3	-2.227	6.213			255.357			343.158	602.501	
A Recharges in respect of 'principal use' assets												
2A.8 Recharges from other segments	£m	3	-4.735	0.000	-1.631	-16.753	-18.384	-3.576	-3.660	-7.236	-30.355	
2A.9 Recharges to other segments	£m	3	0.559	0.000	0.089	6.239	6.328	22.580	0.888	23.468	30.355	
2A.10 Operating profit	£m	3	-6.403	6.213			243.301			359.390	602.501	
2A.11 Surface water drainage rebates	£m	3										0.305

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For line definitions see Excel version of the data tables

Pro forma 2B Totex analysis – wholesale water and wastewater

For the 12 months ended 31 March 2018

Line description	Units	DPs	Water Resources	Water Network+	Wastewater Network+	Sludge	Total	
A Operating expenditure								
2B.1	Power	£m	3	4.516	26.507	50.616	-4.781	76.858
2B.2	Income treated as negative expenditure	£m	3	-0.014	-0.465	-0.165	-8.601	-9.245
2B.3	Abstraction charges/ discharge consents	£m	3	16.564	0.219	6.918	0.300	24.002
2B.4	Bulk supply/ Bulk discharge	£m	3	0.000	0.262	0.000	0.000	0.262
2B.5	Other operating expenditure - renewals expensed in year (Infrastructure)	£m	3	10.482	88.274	62.894	0.843	162.493
2B.6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000
2B.7	Other operating expenditure - excluding renewals	£m	3	10.292	118.810	113.692	41.615	284.409
2B.8	Local authority and Cumulo rates	£m	3	16.511	43.278	23.231	7.076	90.096
2B.9	Total operating expenditure excluding third party services	£m	3	58.350	276.885	257.187	36.452	628.874
2B.10	Third party services	£m	3	0.006	1.163	0.226	0.036	1.431
2B.11	Total operating expenditure	£m	3	58.356	278.048	257.413	36.487	630.305
B Capital Expenditure								
2B.12	Maintaining the long term capability of the assets - infra	£m	3	0.000	0.000	0.000	0.000	0.000
2B.13	Maintaining the long term capability of the assets - non- infra	£m	3	4.639	123.635	192.728	22.464	343.467
2B.14	Other capital expenditure - infra	£m	3	0.113	96.584	116.624	-0.671	212.651
2B.15	Other capital expenditure - non-infra	£m	3	3.945	41.262	82.524	1.821	129.551
2B.16	Infrastructure network reinforcement	£m	3	0.000	1.448	2.575	0.000	4.022
2B.17	Total gross capital expenditure excluding third party services	£m	3	8.697	262.928	394.451	23.614	689.691
2B.18	Third party services	£m	3	0.000	0.000	0.000	0.000	0.000
2B.19	Total gross capital expenditure	£m	3	8.697	262.928	394.451	23.614	689.691
C Grants and contributions								
2B.20	Grants and contributions	£m	3	0.000	22.742	15.550	0.000	38.292
2B.21	Totex	£m	3	67.053	518.234	636.315	60.102	1281.704
D Cash Expenditure								
2B.22	Pension deficit recovery payments	£m	3	1.416	14.795	11.408	3.754	31.373
2B.23	Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000
E Total								
2B.24	Totex including cash items	£m	3	68.469	533.029	647.722	63.856	1313.076

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For line definitions see Excel version of the data tables

Pro forma 2C Operating cost analysis - retail

For the 12 months ended 31 March 2018

Line description		Units	DPs	Household	Non-household	Total
Operating expenditure						
2C.1	Customer services	£m	3	24.638	0.216	24.854
2C.2	Debt management	£m	3	11.506	0.000	11.506
2C.3	Doubtful debts	£m	3	50.390	-6.407	43.983
2C.4	Meter reading	£m	3	3.988	0.000	3.988
2C.5	Services to developers	£m	3		0.250	0.250
2C.6	Other operating expenditure	£m	3	15.650	0.075	15.725
2C.7	Total operating expenditure excluding third party services	£m	3	106.172	-5.866	100.306
2C.8	Third party services operating expenditure	£m	3	0.000	0.000	0.000
2C.9	Total operating expenditure	£m	3	106.172	-5.866	100.306
2C.10	Depreciation - tangible fixed assets	£m	3	1.995	0.000	1.995
2C.11	Amortisation - intangible fixed assets	£m	3	5.453	0.000	5.453
2C.12	Total operating costs	£m	3	113.621	-5.866	107.755
2C.13	Debt written off	£m	3	67.974	0.000	67.974

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma 2D Historic cost analysis of tangible fixed assets – wholesale and retail

For the 12 months ended 31 March 2018

Line description	Units	DPs	Wholesale				Retail		Total	
			Water Resources	Water Network+	Wastewater Network+	Sludge	Household	Non-Household		
A	Cost									
2D.1	At 1 April 2017	£m	3	294.165	4895.038	7652.523	1022.444	46.601	0.000	13910.771
2D.2	Disposals	£m	3	-2.801	-14.623	-25.731	-8.378	0.000	0.000	-51.533
2D.3	Additions	£m	3	8.586	257.842	371.519	23.402	-0.163	0.000	661.186
2D.4	Adjustments	£m	3	-21.318	33.257	-50.223	38.250	0.000	0.000	-0.034
2D.5	Assets adopted at nil cost	£m	3	0.000	6.780	27.352	0.000	0.000	0.000	34.132
2D.6	At 31 March 2018	£m	3	278.632	5178.294	7975.440	1075.718	46.438	0.000	14554.522
B	Depreciation									
2D.7	At 1 April 2017	£m	3	-103.281	-1301.890	-1858.382	-353.068	-39.451	0.000	-3656.072
2D.8	Disposals	£m	3	2.488	12.403	22.016	6.776	0.000	0.000	43.683
2D.9	Adjustments	£m	3	1.595	-11.553	18.683	-8.724	-0.001	0.000	0.000
2D.10	Charge for the year	£m	3	-8.008	-116.008	-178.120	-39.173	-1.995	0.000	-343.304
2D.11	At 31 March 2018	£m	3	-107.206	-1417.048	-1995.803	-394.189	-41.447	0.000	-3955.693
2D.12	Net book amount at 31 March 2018	£m	3	171.426	3761.246	5979.637	681.529	4.991	0.000	10598.829
2D.13	Net book amount at 1 April 2017	£m	3	190.884	3593.148	5794.141	669.376	7.150	0.000	10254.699
D	Depreciation charge for year									
2D.14	Principal services	£m	3	-7.838	-115.644	-178.120	-39.173	-1.995	0.000	-342.770
2D.15	Third party services	£m	3	-0.170	-0.364	0.000	0.000	0.000	0.000	-0.534
2D.16	Total	£m	3	-8.008	-116.008	-178.120	-39.173	-1.995	0.000	-343.304

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For line definitions see Excel version of the data tables

Pro forma 2E Analysis of 'grants and contributions' and land sales - wholesale

For the 12 months ended 31 March 2018

Line description	Units	DPs	Current year				
			Fully recognised in income statement	Capitalised and amortised (in income statement)	Fully netted off capex	Total	
A Grants and contributions - water							
2E.1	Connection charges (s45)	£m	3	0.000	3.984	0.000	3.984
2E.2	Infrastructure charge receipts (s146)	£m	3	0.000	7.469	0.000	7.469
2E.3	Requisitioned mains (s43, s55 & s56)	£m	3	3.052	0.000	0.000	3.052
2E.4	Other contributions (price control)	£m	3	0.000	0.000	0.000	0.000
2E.5	Diversions (s185)	£m	3	7.919	0.000	0.000	7.919
2E.6	Other contributions (non-price control)	£m	3	0.000	0.318	0.000	0.318
2E.7	Total	£m	3	10.971	11.771	0.000	22.742
2E.8	Value of adopted assets	£m	3		6.780		6.780
B Grants and contributions - wastewater							
2E.9	Infrastructure charge receipts (s146)	£m	3	0.000	7.363	0.000	7.363
2E.10	Requisitioned sewers (s100)	£m	3	0.047	0.000	0.000	0.047
2E.11	Other contributions (price control)	£m	3	0.000	2.257	0.000	2.257
2E.12	Diversions (s185)	£m	3	5.105	0.000	0.000	5.105
2E.13	Other contributions (non-price control)	£m	3	0.000	0.777	0.000	0.777
2E.14	Total	£m	3	5.153	10.397	0.000	15.550
2E.15	Value of adopted assets	£m	3		27.352		27.352
C Movements in capitalised grants and contributions							
2E.16	Brought forward	£m	3		129.616	89.859	219.475
2E.17	Capitalised in year	£m	3		11.771	10.397	22.168
2E.18	Amortisation (in income statement)	£m	3		-3.643	-2.744	-6.387
2E.19	Carried forward	£m	3		137.744	97.512	235.256
D Land sales							
2E.20	Proceeds from disposals of protected land	£000	3		2.077	0.108	2.185

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For line definitions see Excel version of the data tables

Pro forma 2F Household – revenues by customer type

For the 12 months ended 31 March 2018

Line description		Wholesale charges revenue £m	Retail revenue £m	Total revenue £m	Number of customers (000s)	Average household retail revenue per customer £
2F.1	Unmeasured water only customer	10.406	1.057	11.463	44.146	24
2F.2	Unmeasured wastewater only customer	4.735	0.472	5.207	24.279	19
2F.3	Unmeasured water and wastewater customer	663.293	60.447	723.740	1642.920	37
2F.4	Measured water only customer	4.385	0.595	4.980	27.298	22
2F.5	Measured wastewater only customer	5.710	0.650	6.360	49.720	13
2F.6	Measured water and wastewater customer	404.099	48.172	452.271	1186.980	41
2F.7	Total	1092.628	111.393	1204.021	2975.343	37

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma 2G Non-household water – revenues by customer type

As per RAG 4.07, where the appointee has exited the non-household market then Tables 2G & 2H should not be completed. Please refer to Table 2I for the corresponding wholesale revenue. Residual revenues required to be reported as non-household under the RAGs are also shown in Table 2I.

Pro forma 2H Non-household wastewater – revenues by customer type

As per RAG 4.07, where the appointee has exited the non-household market then Tables 2G & 2H should not be completed. Please refer to Table 2I for the corresponding wholesale revenue. Residual revenues required to be reported as non-household under the RAGs are also shown in Table 2I.

Pro forma 2I Revenue analysis

For the 12 months ended 31 March 2018

Line description		Units	DPs	Household	Non-household	Total
A Wholesale charge - water						
2I.1	Unmeasured	£m	3	324.679	3.660	328.339
2I.2	Measured	£m	3	197.445	189.516	386.961
2I.3	Third party revenue	£m	3	0.000	4.341	4.341
2I.4	Total	£m	3	522.124	197.517	719.641
B Wholesale charge - wastewater						
2I.5	Unmeasured	£m	3	353.755	3.416	357.171
2I.6	Measured	£m	3	216.749	301.455	518.204
2I.7	Third party revenue	£m	3	0.000	0.000	0.000
2I.8	Total	£m	3	570.504	304.872	875.376
2I.9	Wholesale Total	£m	3	1092.628	502.389	1595.017
C Retail revenue						
2I.10	Unmeasured	£m	3	61.976	0.257	62.233
2I.11	Measured	£m	3	49.417	0.090	49.507
2I.12	Other third party revenue	£m	3	0.000	0.000	0.000
2I.13	Retail total	£m	3	111.393	0.347	111.740
D Third party revenue - non-price control						
2I.14	Bulk Supplies - water	£m	3			0.655
2I.15	Bulk Supplies - wastewater	£m	3			0.137
2I.16	Other third party revenue	£m	3			2.918
E Principal services - non-price control						
2I.17	Other appointed revenue	£m	3			0.165
2I.18	Total appointed revenue	£m	3			1710.633
				Water	Wastewater	Total
2I.19	Wholesale revenue governed by price control	£m	3	719.641	875.376	1595.017
2I.20	Grants & contributions	£m	3	14.505	9.668	24.172
2I.21	Total revenue governed by wholesale price control	£m	3	734.146	885.043	1619.189
2I.22	Amount assumed in wholesale determination	£m	3	744.720	885.290	1630.010
2I.23	Adjustment for in-period ODI revenue	£m	3	0.000	0.000	0.000
2I.24	Adjustment for WRFIM	£m	3	-13.367	-0.536	-13.903
2I.25	Total assumed revenue	£m	3	731.353	884.753	1616.107
2I.26	Difference	£m	3	2.793	0.290	3.082

Key to cells:

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Calculation cell

For line definitions see Excel version of the data tables

Pro forma 2J Infrastructure network reinforcement costs

For the 12 months ended 31 March 2018

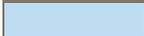
Line description	Units	DPs	Network reinforcement capex	On site / site specific capex (memo only)
------------------	-------	-----	-----------------------------	---

A	Wholesale water network+ (treated water distribution)				
2J.1	Distribution and trunk mains	£m	3	1.448	0.484
2J.2	Pumping and storage facilities	£m	3	0.000	0.000
2J.3	Other	£m	3	0.000	0.000
2J.4	Total	£m	3	1.448	0.484

B	Wholesale wastewater network+ (sewage collection)				
2J.5	Foul and combined systems	£m	3	2.575	0.000
2J.6	Surface water only systems	£m	3	0.000	0.000
2J.7	Pumping and storage facilities	£m	3	0.000	0.000
2J.8	Other	£m	3	0.000	0.000
2J.9	Total	£m	3	2.575	0.000

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 Calculation cell

For line definitions see Excel version of the data tables

2.4) Accounting policies

For the 12 months ended 31 March 2018

The Regulatory Accounts have been prepared in accordance with IFRS, except for the areas of revenue recognition, capitalisation of interest, grants and contributions and adopted assets (IFRIC 18) as required by Ofwat. Details of all significant accounting policies applied under IFRS are detailed in the United Utilities Water Limited statutory accounts. In addition, the RAGs require certain presentational differences within the income statement and statement of financial position between the statutory and the regulatory accounts.

Individual lines within the regulatory tables are rounded to 2 or 3 decimal places, as specified by Ofwat, therefore there may be instances where the total line within a table is not equal to the sum of the values presented.

Capitalisation policy

The company recognises property, plant and equipment (PPE) expenditure on its water and wastewater infrastructure assets where such expenditure enhances or increases the capacity of the network, whereas any expenditure classed as maintenance is expensed in the period it is incurred. Determining enhancement from maintenance expenditure is a subjective area, particularly when projects have both elements within them.

For non-infrastructure assets, expenditure that is directly attributable to the acquisition of the items of PPE and intangible assets is capitalised. Subsequent costs are included in the asset's carrying amount, or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the company and the cost of the item can be measured reliably. All other repairs and maintenance costs are charged to the income statement during the financial period in which they are incurred. The only exception to IFRS, as required by RAG 1.08 'Principles and guidelines for regulatory reporting under the 'new UK GAAP' regime', is that the company does not capitalise interest in the Regulatory Accounts. The company applies a minimum capital limit per project of £500, any expenditure below this limit is expensed.

Price control segments policy

The accounts have been drawn up in accordance with RAG 2.07 'Guideline for the classification of costs across the price controls'. The main change from the prior year is the inclusion of the new APR Table 2J, splitting out Infrastructure network reinforcement costs by type of spend. Also, following our formal exit of the non-household market, we are no longer required to include Tables 2G and 2H which previously provided breakdowns of our non-household revenues.

As noted in our Accounting Policies note to the U UW statutory accounts, management capitalises time and resources incurred by the company's support functions on capital programmes. In accordance with RAG 1.08 our historic cost accounting statements will be in line with IFRS, except for deviations as specifically required by Ofwat (see 'Differences between statutory and RAG definitions' on pages 148-150). As such, any attribution or allocation of support costs between price controls is performed on the net cost balance after capitalisation. This approach is consistent with prior years and with our price review submission.

All notable methodology changes from the prior year, as well as details of cost allocations used per cost line, can be found in our 2017/18 accounting methodology statement, published on our website alongside the APR.

Allocation of costs to principal services

Direct costs are charged to the sub-service areas to which they are attributable, as defined in RAG 4.07. Business activities and indirect costs are allocated on an activity basis using quantitative measures such as full time equivalent employee numbers and other methods reflecting consumption of service.

Appointed and non-appointed activities

The company has used the guidance in RAG 4.07 Appendix 1 in determining which of its activities are appointed or non-appointed. In summary, the appointed business is defined as the regulated activities of the Appointee, i.e. those necessary to fulfil the functions and duties of a water and sewerage undertaker. The non-appointed business encompasses those activities for which the company is not a monopoly supplier or those activities which involve the optional use of an asset owned by the appointed business.

Revenue recognition policy

Revenue represents the income receivable in the ordinary course of business from the regulated activities of the business in the year exclusive of value added tax. Charges billed to customers for water and sewerage services are recognised in the period in which they are earned. An accrual is estimated for measured consumption that has not yet been billed.

Where an invoice has been raised or payment made but the service has not been provided in the year this will not be recognised within the current year's revenue but will instead be recognised within creditors.

Charges on income arising from court, solicitors and debt recovery agency fees are credited to operating costs and added to the relevant customer account. They are not recognised within revenue.

Charging policy

Water and sewerage charges fall into the following three categories:

- Charges which are payable in full;
- Charges which are payable in part; and
- Not chargeable (void properties).

The circumstances in which each of the above applies are set out below.

Charges payable in full

Water (and sewerage) charges are payable in full in the following circumstances:

Unmeasured household supply - when premises benefit from a supply of water, until notice is given by the customer that the supply should be disconnected

Measured household supply – premises with a measured water supply are charged until either:

- The customer leaves the premises having given an up to date meter reading; or
- The customer requests that the supply is disconnected.

Non-household supply – charges are applied to each and every connected supply point where a service is received, except where the water supply to the premises is permanently disconnected or the premises is vacant.

This includes premises where renovation, redecoration or building work is being undertaken;

Exceptions to this, where water (and sewerage) charges are not payable, include:

- Where the occupier is a sole occupier in a care home for three months or more;
- Where the occupier is a sole occupier in long-term hospitalisation for three months or more;
- Where the occupier is a sole occupier in prison for three months or more; or
- In the event of the death of a sole occupier.

Charges payable in part

The following charges only are payable in certain circumstances:

Metered standing charges

Payable on metered properties without evidence of consumption which remain connected.

Surface water drainage and highway drainage charges

Payable where there is evidence of consumption for metered premises or an unmeasured water supply has been temporarily disconnected.

Not chargeable

Properties which are identified as vacant are not chargeable for water (and sewerage) and therefore no billing is raised and no revenue recognised in respect of these properties.

Definition and treatment of properties

Occupied properties

The occupier is any person in actual occupation of premises, or any person who:

- Owns the premises; or
- Has sufficient control over premises to put him under a duty of care towards lawful visitors; or
- Maintains premises for occupation (including multiple occupation) with shared facilities or as holiday or household accommodation for short term occupation (whether let wholly or in part), usually less than 12 months

No bills are raised in the name of “the occupier”.

The property management process is followed to identify whether the property is occupied or not and, if occupied, to identify the chargeable person and raise a bill.

The property management process may comprise some or all of the following:

- Physical inspection;
- Mailings;
- Customer contacts;
- Searches using third party electronic data;
- Meter readings for metered properties;
- Land registry checks.

When a new customer is identified, they may be required to provide documentary evidence to establish the date that they became responsible for water (and sewerage) charges at the property. This is normally the date at which they moved into the property. The new customer will be charged from the date at which they became responsible for water (and sewerage) charges of the premises.

For non-household customers, the Wholesale Settlement team use Central Market Operating System (CMOS) meter read data to identify vacant Supply Point Identifications (SPIDs) with consumption. Where consumption exists, we will engage with the relevant retailer, and follow the market process to ensure the SPID is recorded correctly as either vacant, or occupied in the market.

Unoccupied properties

A property is deemed to be unoccupied when the company has completed the property management process and not identified the property as occupied. To be classified as unoccupied a property must meet at least one of the following criteria:

- A new property has been connected but is empty and there is no consumption on the meter;
- The company has been informed that the customer has left the property; and not expected to be reoccupied immediately;
- It has been disconnected following a customer request;
- The property management process has not identified an occupier; or
- The company has been informed that for three months or more, the customer is in a care home, in long-term hospitalisation, or in prison.

If the property management process confirms that the property is unoccupied, the property will be declared void and the supply may be turned off.

New properties

All new properties are metered. Until the new occupier has been identified, the property is treated as unoccupied and is not billed.

Measured income accrual

The household measured income accrual is an estimation of the amount of mains water and sewerage charges unbilled at the year end. The accrual is estimated using a defined methodology based on weighted average water consumption by tariff, which is calculated based on historical information. The measured income accrual is recognised within turnover.

An estimation of the non-household mains water and sewerage charges unbilled at the year-end is calculated and a measured income accrual recognised within turnover. The accrual is estimated using a defined methodology based on historical water consumption of individual customers or based on meter size where individual consumption is not available for use.

There has been no change to the methodology in calculating the measured income accrual since the prior year.

Bad debt policy

Household

Bad debt is written off when all economically viable efforts to recover outstanding amounts have been fully exhausted or, alternatively, when the write off of such amounts forms part of customer rehabilitation processes (subject to acceptance criteria and customer “matching” payments). The company’s bad debt write-off policy has remained unchanged and has been consistently applied in the current year compared with the previous year. The level of write-off has increased from £63.9 million in 2016/17 to £68.0 million in 2017/2018. A change in our payment matching scheme in year, whereby a customer’s debt is written off after making regular payments for two years, and an increase in the number of customers on the scheme has led to an increased value of write offs in year.

The household bad debt provision is charged to operating costs to reflect the company’s assessment of the risk of non-recoverability of debtors. Household has continued to consistently apply its provisioning model last updated in 2014/15 to calculate the bad debt provision. The provision model applies expected recovery rates to debts outstanding at the end of the accounting period. The overall expected recovery rate takes into account the age of the debt, payment history and type of debt.

Higher provisioning percentages are applied to categories of debt of greater age. Bad debt provisioning rates will be reviewed annually to ensure they continue to reflect the latest collection performance data from the company’s billing system. All debt greater than 3 years old is fully provided for.

The actual level of debt collected may differ from the estimated levels of recovery, which could impact operating results positively or negatively.

The household bad debt provision policy has remained unchanged and has been consistently applied in the current and prior years. The bad debt provision has reduced by £16.2 million from 31 March 2017 to 31 March 2018 and the household trade debtor balance has reduced by £29.3 million. The reduction in both the bad debt provision and the household debtor balance is a result of our strong focus on improving bad debt and cash collection performance. Our improvement in cash collection performance seen in the prior year led to a cleaner debt book brought forward into the current year and this improved cash performance has been sustained into the current year both resulting in reductions in the bad debt charge and household debtor balance. In addition to this further reductions have arisen from the positive impact of the introduction of billing and collections initiatives including the successful rollout of our award winning Town Action Plan which has significantly increased the number of customers benefiting from our Financial Assistance Schemes.

Non-household

Following the transfer of non-household activities to Water Plus on 1st June 2016, Water Plus have collected outstanding debt on behalf of UUW and where debt has been determined as non-recoverable, it has been written off to the provision. At 31 March 2018, the gross debt had been sold to Water Plus, and the remaining provisions released against the gross debt balance. As a result no gross debt or provisions relating to non-household debt pre 1st June 2016 remain on the company balance sheet. The overall settlement resulted in a £6.4 million credit to the bad debt charge in the year.

Dividend policy

UUK's current dividend policy for the 2015-20 regulatory period is to distribute:

- A base return of 5% on the equity portion of the Regulatory Capital Value (RCV);
- Non-appointed business profit; and
- An amount no greater than cumulative out performance delivered compared to the assumptions made by Ofwat in the determination for the relevant period.

In addition, there will be a true-up of the previous year's dividend, arising from differences between the forecast and actual equity portion of the RCV.

The Board believe this represents an appropriate policy taking into consideration:

- The challenges of the 2015/2020 final determination;
- The aim to invest an extra £250 million into resilience programmes for the benefit of customers;
- The importance of income to shareholders; and
- The need to retain a robust and sustainable capital structure.

The Board reviews the ongoing appropriateness of its dividend policy annually.

2.5) Additional unaudited regulatory information

Differences between statutory and RAG definitions

Revenue recognition

The following differences exist between the revenue recognition policies in the statutory accounts and in the regulatory accounts:

- IAS18 has been applied to the statutory accounts and requires revenue to be recognised only when it is probable that economic benefits associated with the transactions will flow to the company. The regulatory accounts, however, require revenue to be recognised in full unless properties have been confirmed as being void; and
- Income from energy generation, exported energy, renewable obligation certificates (ROC) and ROC bonuses is treated as revenue in the statutory accounts but as negative operating expenditure in the regulatory accounts.

Capitalisation of borrowing costs

For statutory reporting, interest costs under IAS23 are capitalised and subsequently depreciated, whereas interest is charged immediately as an expense in the regulatory accounts.

Grants and contributions

All grants & contributions (G&Cs) recognised in the income statement under IFRS have been reclassified as other income in the regulatory accounts. More specifically this comprises of the following three reclassifications:

- Requisitioned mains and requisitioned sewers income from revenue to other income
- Diversion income from operating costs to other income
- The amortisation of capitalised grants and contributions from operating costs to other income

Adopted Assets (IFRIC 18)

Under IFRS, we recognise adopted assets from customers or developers on the balance sheet and amortise the income over the life of the asset through revenue. The amortisation of this income has been reclassified to other income in the regulatory accounts.

Preference share capital

Under IFRS, we recognise preference share capital within current liabilities. However, in order to ensure the better presentation of net debt is reported in APR Table 1E - which only includes non-current preference share capital - we reclassified preference share capital from current to non-current liabilities in the regulatory accounts for 2017/18.

The differences in Revenue, Operating profit, Other income and Profit before tax within table 1A can be summarised as follows:

Revenue:	£m
Revenue recognition	20.298
Reclass of ROC income to opex	(5.704)
Income from energy generation and export	(3.272)
Adopted assets	(3.251)
G&Cs - Requisitioned water mains and sewers	(3.099)
Total differences	4.972

Operating profit:	£m
Revenue recognition	(2.756)
Adopted assets	(3.251)
G&Cs - Requisitioned water mains and sewers	(3.099)
G&Cs - Diversion income	(13.024)
Amortisation of G&Cs	(6.387)
Capitalisation of borrowing costs	4.109
Reclassification from opex to other income*	(3.614)
Other	0.269
Total differences	(27.753)

Other income:	£m
Adopted assets	3.251
G&Cs - Requisitioned water mains and sewers	3.099
G&Cs - Diversion income	13.024
Amortisation of G&Cs	6.387
Reclassification from opex to other income	3.614
Other	(0.269)
Total differences	29.106

*Other income in the statutory accounts is included within operating costs, separately disclosed in the regulatory accounts

The differences in Total non-current assets, Total current assets, Total current liabilities and Total non-current liabilities within table 1C can be summarised as follows:

Total non-current assets:	£m
Capitalisation of borrowing costs	(144.196)
Other	(0.704)
Total differences	(144.900)

Total current assets:	£m
Revenue recognition	20.235
Other	0.117
Total differences	20.352

Total current liabilities:	£m
Preference share capital	130.000
Total differences	130.000

Total non-current liabilities:	£m
Preference share capital	(130.000)
Deferred tax adjustment	24.185
Total differences	(105.815)

Tax strategy

Consistent with our wider business objectives, we are committed to acting in a responsible manner in relation to our tax affairs.

Our tax policies and objectives, which are approved by the Board on an annual basis, ensure that we:

- only engage in reasonable tax planning aligned with our commercial activities and we always comply with what we believe to be both the letter and the spirit of the law;
- do not engage in aggressive or abusive tax avoidance;
- are committed to an open, transparent and professional relationship with HMRC based on mutual trust and collaborative working; and
- maintain a robust governance and risk management framework to ensure that these policies and objectives are applied at all levels.

In line with the above, we expect to fully adhere to the HMRC framework for co-operative compliance.

Our Chief Financial Officer (CFO) has responsibility for tax governance with oversight from the board. The CFO is supported by a specialist team of tax professionals with many years of tax experience within the water sector and led by the Head of Tax. The Head of Tax has day-to-day responsibility for managing the company's tax affairs and engages regularly with key stakeholders from around the company in ensuring that tax risk is proactively managed. Where appropriate, he will also engage with both external advisers and HMRC to provide additional required certainty with the aim of ensuring that any residual risk is typically low. All significant tax issues are reported to the Board regularly.

Consistent with the company's general risk management framework, any tax risks are assessed for the likelihood of occurrence and the negative financial or reputational impact on the company and its objectives, should the event occur. In any given period, the key tax risk is likely to be the introduction of unexpected legislative or tax practice changes which lead to increased cash outflow which has not been reflected in the current regulatory settlement. The company is committed to actively engaging with relevant authorities in order to actively manage any such risk.

In any given year, the company's effective cash tax rate on underlying profits may fluctuate from the standard UK rate due to the available tax deductions on capital investment and pension contributions. These deductions are achieved as a result of utilising tax incentives, which have been explicitly put in place by successive governments precisely to encourage such investment. This reflects responsible corporate behaviour in relation to taxation.

Under the regulatory framework the company operates within, the majority of any benefit from reduced tax payments will typically not be retained by the company but will pass to customers; reducing their bills. For 2017/18, the impact of tax deductions on capital investment alone reduced average household bills by around £20.

Every year, the company pays significant contributions to public finances on its own behalf as well as collecting and paying over further amounts for its 5,000 strong workforce. Details of the total payments for 2018 of around £240 million are set out below;

- Business rates – £91 million
- Corporation tax - £35 million
- Employment taxes: company - £22 million
- Employment taxes: employees - £50 million
- Environmental taxes and other duties - £15 million
- Regulatory services fees (e.g. water extraction charges) - £27 million

We expect the above details, which apply for the year ended 31 March 2018, to fully comply with the new legislative requirements for "Publication of Group Tax Strategies" for UK groups.

Current tax reconciliation

	£m
Profit on ordinary activities before tax and fair value movements as per Table 1A line 9	<u>344.5</u>
Multiplied at the standard rate of corporation tax of 19%	65.5
Capital allowances in excess of depreciation	(28.3)
Adjustment in respect of prior years	(5.4)
Net non-deductible expenses	3.0
Pension deductions	(6.6)
Fair value movements	(8.1)
Other timing differences	0.1
Appointed business current tax charge	<u>20.2</u>

We are not aware of any factors affecting future tax charges in AMP 6. (i.e. through to 2019/20).

Reconciliation of significant variations between the appointed current tax charge or credit reported in line 1A.12 to the total current tax charge allowed in price limits:

	£m	Commentary
Current tax charge allowed in price limits	<u>53.0</u>	
Adjustment in respect of prior years	(5.4)	The adjustment arises following the submission of the tax computations and mainly relates to a net increase in capital allowance claims
Pension deductions	(4.8)	The tax impact of the increase in pension deductions compared to the figures in the Financial Determination
Net increase in profit before tax and depreciation	3.9	The tax impact of the increase in profit before tax and depreciation compared to the figures per the Final Determination
Fair value movements	(13.3)	Non-taxable interest on currency and electricity swaps
Financing adjustments	7.2	The actual interest charge is lower than the notional amount assumed for price limit calculations
Increase in capital allowances/other	(15.0)	The increase in capital allowances is mainly due to increased capital expenditure
Reduction in tax rate from 20% to 19%	(2.6)	Impact of the corporation tax rate change
Non-household Retail tax allowance	(2.9)	Impact of the disposal of the Non-household business
Appointed current tax charge per line 1A.12	<u>20.2</u>	

Long term viability statement

The directors have assessed the viability of UUW, taking account of UUW's current position, the potential impact of the principal risks facing the business in severe but reasonable scenarios, and the effectiveness of any mitigating actions. This assessment has been performed in the context of UUW's prospects as considered over the longer term. Based on this viability assessment, the directors have a reasonable expectation that the company will be able to continue in operation and meet its liabilities as they fall due over the five year period to March 2023.

This viability statement is based on the fundamental assumption that the current regulatory and statutory framework does not substantively change, for example change which facilitated the compulsory purchase of the shares or assets of either UUW or its ultimate parent, UUG, for the re-nationalisation of the water sector, throughout the viability assessment period.

The long-term planning detailed on page 37 of the UUW statutory accounts assesses the company's prospects and establishes its strategy over a 25-year time horizon consistent with its rolling 25-year licence and its published long-term strategy. This provides a framework for the company's strategic planning process, and is key to achieving the company's aim of providing the best service to customers at the lowest sustainable cost and in a responsible manner over the longer term, underpinning our business model set out on pages 20 to 21 of the UUW statutory accounts. In order to achieve this aim and promote the long-term sustainability and resilience of the business, due consideration is given to the management of risks that could impact on the business model, future performance, solvency and liquidity of the company. An overview of our risk management approach that supports the company's long-term planning and prospects, together with the principal risks and uncertainties facing the business, can be found on pages 51 to 57 of the UUW statutory accounts.

The viability statement for the five year period to March 2023 has been assessed based upon the company's medium-term business planning process, which sits within the overarching strategic planning process and considers:

- The company's current liquidity position - which provides headroom to cover projected financing needs through until mid-2019;
- The company's robust capital solvency position - with a debt to regulatory capital value (RCV) ratio of around 65 per cent, providing considerable headroom supporting access to medium-term liquidity as required; and
- The current regulatory framework within which the company operates - which provides a high degree of certainty over cashflows in the short to medium term and broader regulatory protections in the longer term.

The analysis underpinning this assessment has been through a robust internal review process, which has included scrutiny and challenge from the Audit Committee, and has been reviewed by the group's external auditors, KPMG, as part of their normal audit procedures.

UUW has a proven track record of being able to raise new forms of finance in most market conditions, and expects to continue to do so into the future. In addition, the Board has considered the protections which exist from the regulatory and economic environment within it operates.

From an economic perspective, given the market structure of water and wastewater services, threats to the company's viability from risks such as reduced market share, substitution of services and reduced demand are low compared to those faced by many other industries.

From a regulatory perspective the company currently benefits from a rolling 25-year licence and a regulatory regime in which regulators – including the economic regulator, Ofwat – are required to have regard to the principles of best regulatory practice. These include that regulation should be carried out in a way which is transparent, accountable, proportionate, consistent and targeted. Ofwat's primary duties provide that it should protect consumers' interests, by promoting effective competition wherever appropriate, secure that the company properly carries out its statutory functions, secure that the company can finance the proper carrying out of these functions – in particular through securing reasonable returns on capital, and secure that water and wastewater supply systems have long-term resilience and that the company takes steps to meet long term demands for water supplies and wastewater services.

The business planning process is closely aligned with these principles, and, coupled with the company's robust management of risks, gives confidence that current and future regulatory price controls will provide certainty around cash flows that will support the continuing viability and prospects of the group. For these reasons the Board considers it appropriate to provide a medium-term viability statement of five years.

The directors have assessed U UW's viability in the context of its expected performance and past ability to deliver for customers, considering the principal risks as set out on pages 54 to 57 of U UW's statutory accounts and its ability to absorb a number of severe but reasonable scenarios including those arising from operational and environmental risks, political and regulatory risks, the risk of critical asset failure and the potential for a restriction to the availability of financing resulting from a global capital markets crisis. The viability assessment has considered the potential impacts of these risks on the company's business model, future performance, solvency and liquidity based on a number of stress-tested and sensitised scenarios in which the company is assumed to face a series of the top risks in terms of the most severe impact and likelihood of occurring over the course of the viability assessment period. As well as the protections which exist from the regulatory environment within which the company operates, a number of mitigating actions are available in the kind of severe scenarios considered, including the raising of new finance, capital programme deferral, the close out of derivative asset positions, the restriction of dividend payments, and access to additional equity. These actions provide the company with significant scope to improve its liquidity and capital position to further absorb such threats.

In addition, the assessment has also considered the impact of the common scenarios proposed by Ofwat in a recent PR19 consultation⁽¹⁾ on the company's ability to maintain its credit ratings, financial metrics and its ability to service debt.

- The individual scenarios modelled assumed a totex under performance of 15%, inflation 3% above/below the forecasts published by the Treasury, an increase in bad debt of 20% and new debt at 2% above forward interest rate projections - for each year of the viability period - and an ODI penalty at 3% of RoRE and a financial penalty at 3% of turnover in relation to one year of the viability period.
- The combined scenario modelled assumed totex and retail cost under performance of 10% and an ODI penalty at 1.5% of RoRE - in each year of the viability period - and a financial penalty of 1% of revenue in relation to one year of the viability period.

The principal financial risk not captured within these scenarios relates to the funding deficit of defined benefit pension schemes. As the company's schemes are well funded and operate an asset liability investment mandate hedging the liability exposure, pension risk is not considered to have a material impact on the company's viability assessment.

The company's existing credit ratings are A3 with Moody's and A- with Standard & Poor's. In all but the most extreme scenarios the company would reasonably expect, on a standalone basis, to be able to maintain credit ratings of A3, BBB+ without having to consider mitigating actions, while in the most extreme scenarios the credit rating is likely to reduce further to Baa1, BBB. The most extreme scenario results in a c6% increase in debt to RCV gearing⁽²⁾ to c65%, a c1.3x reduction in adjusted interest cover⁽³⁾ to c1.4x and a c3% reduction in FFO to debt⁽⁴⁾ to c7% by the end of the viability period. Following any stress period, FFO would then be reasonably expected to revert to more normalised levels, improving adjusted interest cover to c1.8x and FFO to debt to c8% which supports the Baa1, BBB credit rating associated with the extreme scenario. Given the strong capital base and prudent levels of liquidity none of the scenarios are reasonably expected to impact the company's ability to service debt.

Mitigating actions to support the overall financeability of the company could include: a temporary reduction in dividends; a revised dividend policy; or the raising of new equity capital. As a consequence of the significant equity base, dividends across the viability period represent c12% of the RCV at the end of the viability period, providing substantial headroom to improve the capital strength of the company and its credit ratings and/or allow the company to absorb more extreme downward scenarios.

The directors also considered it appropriate to prepare the financial statements on the going concern basis, as explained in the basis of preparation paragraph on page 96 of U UW's statutory accounts.

⁽¹⁾ Putting the sector back in balance: Consultation on proposals for PR19 business plans (April 2018)

⁽²⁾ Debt to RCV gearing is calculated based on U UW's shadow RCV

⁽³⁾ Adjusted interest cover calculated based on the methodology published by Moody's

⁽⁴⁾ FFO to debt calculated based on the methodology published by Standard & Poor's

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

To the best of their knowledge, the directors of the company declare that all appropriate transactions with associated companies have been disclosed and material transactions with associated companies are at arm's length and no cross-subsidy has occurred. The materiality level of transactions used for reporting is 0.5 per cent of turnover.

Borrowings and loans

The following loans from associated companies existed at 31 March 2018:

	£m	Interest rate	Repayment date
United Utilities PLC: overdraft facility	12.242	0.5%+LIBOR	On demand
United Utilities: £140.0 million loan	129.616	0.175%+LIBOR	On 18 months-notice
United Utilities: £130.0 million loan	130.000	0.175%+LIBOR	June 2018
United Utilities £205.5 million loan	205.520	0.175%+LIBOR	February 2019
United Utilities: £300.0 million loan	150.000	0.175%+LIBOR	Amortising until August 2020
United Utilities Water Finance PLC: GBP Notes 2.0% 2025	301.548	2.000%	February 2025
United Utilities Water Finance PLC: GBP 0.013% RPI Bond 2025	26.905	0.013%+RPI	April 2025
United Utilities Water Finance PLC: HKD Notes 2.92% 2026	66.887	2.920%	February 2026
United Utilities Water Finance PLC: EUR Notes 1.129% 2027	44.462	1.129%	April 2027
United Utilities Water Finance PLC: HKD Notes 2.37% 2027	72.440	2.370%	October 2027
United Utilities PLC: \$400.0 million bond	347.740	6.875%	August 2028
United Utilities Water Finance PLC: GBP 0.01% RPI Bond 2028	22.904	0.01% +RPI	September 2028
United Utilities Water Finance PLC: GBP 0.178% RPI Bond 2030	37.650	0.178%+RPI	April 2030
United Utilities Water Finance PLC: EUR Notes 2.058% 2030	26.650	2.058%	October 2030
United Utilities Water Finance PLC: HKD Notes 2.9% 2031	48.270	2.9%	June 2031
United Utilities Water Finance PLC: EUR Notes 1.641% 2031	25.019	1.641%	June 2031
United Utilities Water Finance PLC: GBP 0.245% CPI Bond 2031	20.597	0.245%+CPI	December 2031
United Utilities Water Finance PLC: GBP 0.01% RPI Bond 2031	42.552	0.01% +RPI	December 2031
United Utilities Water Finance PLC: EUR Notes 1.707% 2032	24.700	1.707%	October 2032
United Utilities Water Finance PLC: EUR Notes 1.653% 2032	22.430	1.653%	December 2032
United Utilities Water Finance PLC: EUR Notes 1.70% 2033	26.418	1.700%	January 2033
United Utilities Water Finance PLC: GBP 0.01% RPI Bond 2036	31.791	0.01% +RPI	September 2036
United Utilities Water Finance PLC: GBP 0.379% CPI Bond 2036	20.579	0.379% +CPI	December 2036
United Utilities Water Finance PLC: GBP 0.01% RPI Bond 2036	32.541	0.01% +RPI	December 2036
United Utilities Water Finance PLC: GBP 0.093% CPI Bond 2037	61.353	0.093% +CPI	February 2037
United Utilities Water Finance PLC: GBP 0.359% CPI Bond 2048	32.353	0.359% +CPI	October 2048
United Utilities Water Finance PLC: GBP 0.387% CPI Bond 2057	33.003	0.387% +CPI	October 2057
United Utilities North West Limited: preference shares	130.000	7.0%	October 2099

The following loans to associated companies existed at 31 March 2018:

	£m	Interest rate	Repayment date
United Utilities PLC: £40.0m loan	40.000	0.5%+LIBOR	1 months notice
Water Plus Group Ltd: £100.0m revolving credit facility*	100.000	1.475% +LIBOR	September 2019

*This revolving credit facility is guaranteed by United Utilities PLC

Dividends paid to associated undertakings

During 2017/18, interim dividends were paid to the parent company, United Utilities North West Limited, totalling £316.670 million (2017: £229.680 million). No final dividend has been recommended for 2017/18 (2017: £nil).

In line with the dividend policy, dividends paid of £316.670m comprised:

- £207.900m base return of 5% of the equity portion of the Regulatory Capital Value:
- £5.000m estimated non-appointed profits for 2017/18
- £94.070m distributed out performance in relation to 2016/17 and 2017/18
- £9.700m true-up of prior years' base dividends

Guarantees by the appointee

A financing subsidiary of United Utilities Water Limited (UUW), United Utilities Water Finance PLC (UUWF), was set up in 2014/15 to issue new listed debt on behalf of UUW, following UUW's re-registration as a private limited company. Debt instruments issued by UUWF (as listed in borrowing and loans above) have been guaranteed by UUW.

Transfer of assets by or to the appointee

There were no transfers of assets or liabilities by or to the company in excess of the materiality limit in 2017/18.

Services supplied to the company by associated companies

Nature of transaction	Company	Turnover of associate £m	Terms of supply	2018 Total value of goods, work or services £m
Functions	UU PLC	-	Employment costs	21.634
Share-based payments recharge	UU Group PLC	-	Employment costs	3.162
Accommodation	UU Property Services	15.385	Contract price	0.118
Purchase of energy	UU Renewable Energy	4.843	Contract price	2.504
Estate charges	Lingley Mere Bus Park Co Ltd	0.797	Contract price	0.667
				<u>28.085</u>

Services supplied by the company to associated companies

Nature of transaction	Company	Turnover of associate £m	Terms of supply	2018 Total value of goods, work or services £m
Employment costs and travel costs	Water Plus Ltd	548.641	Recharge of costs	0.017
Employment costs and travel costs	UU Property Services	15.385	Recharge of costs	0.471
Employment costs and travel costs	UU PLC	-	Recharge of costs	0.791
Employment costs and travel costs	UU International Ltd	0.893	Recharge of costs	0.515
Employment costs and travel costs	UU Total Solutions	0.508	Recharge of costs	0.417
Employment costs and travel costs	UU Renewable Energy	4.843	Recharge of costs	1.071
Employment costs and travel costs	UU Utility Solutions (Industrial) Ltd	-	Recharge of costs	0.097
Wholesale water/wastewater charges	Water Plus Ltd	548.641	Contract price	494.578
Wholesale water/wastewater charges	Water Plus Select Ltd	413.059	Contract price	0.779
Programme and TSA charges	Water Plus Ltd	548.641	Recharge of costs	1.367
Business development costs	UU PLC	-	Recharge of costs	0.014
Wastewater treatment services	UUW Ltd (non appointed)	4.383	Contract price	2.095
Accommodation	UU Property Services	15.385	Recharge of costs	0.106
Property searches	UUW Ltd (non appointed)	4.064	Contract price	1.979
				504.297

Corporation tax group relief received/surrendered by regulated business

Nature of transaction	Company	Turnover of associate £m	Terms of supply	Value £m
Corporation tax group relief received by regulated business	UU Group PLC	-	The payment was calculated by multiplying the gross loss by the mainstream rate of corporation tax resulting in £1.4m of group relief received	1.356

Services supplied by the non-appointed business

Service	Basis of recharge made by the appointed business	Value of the recharge made by the appointed business £m
Treatment of imported sludge	Nil	-
Treatment of tankered waste	The appointed business recharges the non-appointed business for treating tankered waste at wastewater treatment works. The recharge is calculated using the Mogden formula based on tankered waste volumes and as per RAG 2.07 (2.8) the income is recorded as negative expenditure, reducing appointed operating expenditure.	1.988
Other	The appointed business recharges the non-appointed business for the use of operating systems consumed directly in the performance of non-appointed activities. This is calculated based on the frequency and proportion of system use.	1.760

Additional table narrative

Table 1C - Statement of financial position

Within 2017/18 we have reported capex creditors (line 14) within current liabilities in Table 1C as zero and included a capital accruals liability, representing work-in-progress not yet invoiced, of £41.470m within trade & other payables (line 13). In previous years, we included capital accruals within capex creditors (line 14). We believe this change in classification represents an improved presentation of the capital accruals balance.

Table 1E - Net debt analysis

All figures in table 1E have been calculated by reference to 'RAG 4.07 - Guideline for the table definitions in the annual performance report'.

Net debt excludes fair value accounting adjustments which do not impact on the principal sum outstanding on the debt. The interest rate risk profile does not take account of the impact on interest of derivative instruments.

Adjusted gearing (line 8) represents the consolidated net debt of United Utilities Group PLC as a proportion of the company's RCV (per the Final determination, in outturn prices), calculated based on the methodology published by Moody's Investor Services. This is the gearing measure most commonly used by management and is a key ratio used by Moody's Investor Services in determining the credit rating of the company.

Indicative weighted average interest rates are based on the effective interest rates as at the balance sheet date, which includes the impact of derivative instruments but excludes those with a forward start date, weighted by the notional principal amount.

Due to the nature of the company's interest rate hedging policy, it has some forward starting interest rate swaps which are not included in the indicative weighted average interest rates as they are not effective at the balance sheet date. As a result the indicative weighted average interest rates are only representative of our economic cost of borrowing as at the balance sheet date and are not representative of our economic cost of borrowing over the duration of the fixed interest rate hedge.

The indicative weighted average nominal/cash interest rates (lines 11 and 12) for floating interest rate debt are unrepresentative of the cost of these borrowings and as such, have not been disclosed in the tables. We hedge most of our floating interest rate exposure through 'floating to fixed' interest rate swaps which results in a very low net floating interest rate exposure. As a consequence the interest cost ends up as a small interest expense once we strip out the fixed margin on the debt, due to the basis and timing differences on the floating rate legs of the debt and derivative contracts. The calculated rate was 0.50% as at 31 March 2018 based on a £4.0 million net interest payable on £815.8m of net floating rate debt (after the impact of swaps).

Weighted average years to maturity takes account of all applicable contractual commitments, which includes derivative instruments with a forward start date, weighted by notional amount and duration.

The calculation of the weighted average years to maturity on floating rate borrowings provides an unrepresentative figure and, as such, has not been disclosed in the tables. Typically we raise debt in fixed rate form, swap it to floating rate for the duration of the debt instrument and then swap it back to fixed rate on a 10 year reducing balance basis. This hedged position makes it difficult to calculate the weighted average duration in a meaningful way.

An annual RPI increase of 3.3 per cent at March 2018 has been applied.

An annual CPI increase of 2.4 per cent at March 2018 has been applied.

Borrowings reconciliation

The below table shows the reconciliation from borrowings within Table 1C to borrowings in Table 1E

	£m	
Borrowings - current	(675.832)	Table 1C Line 15
Borrowings - non-current	(7,302.483)	Table 1C Line 22
Borrowings (table 1C)	(7,978.315)	IFRS measurement basis
Remove fair value movements	443.947	
Remove bond discount	(0.003)	
Remove interest accrued on FVO debt	2.504	
Borrowings (table 1E)	(7,531.867)	Notional value basis

Table 2D - Historic cost analysis of tangible fixed assets

Lines 4 and 9 of Table 2D 'Adjustments' includes reclassifications of assets between price controls. These reclassifications have mainly occurred due to data cleanse activities relating to the implementation of our new asset maintenance and resource scheduling system.

Table 2E - Analysis of 'grants and contributions' and land sales

An opening balance reduction of £0.200 million has been made to Line 16 - Brought forward capitalised grants and contributions to reconcile to the deferred income position in Table 1C.

Return on regulatory equity

The notional base case return on regulatory equity (RORE) that was assumed in the PR14 final determination was 5.63%. The outturn RORE position across 2015/16, 2016/17 and 2017/18 (taken as the simple average of the three years) was 7.08% with the breakdown of this position shown in the table below.

When reading the following table, it should be noted that comparisons between the base case and reported RORE can be misleading; the outturn numbers reflects the U UW actual company-specific position (in line with Ofwat's reported RORE definition) whereas the base case return in the FD is based on a theoretical, efficient company with a notional capital structure and a notional cost of debt.

	2015/16	2016/17	2017/18	Cumulative	Narrative
Base case RORE as per FD	5.63%	5.63%	5.63%	5.63%	
Remove business retail margin	0.00%	(0.09%)	(0.11%)	(0.07%)	1
Adjusted base case RORE	5.63%	5.54%	5.52%	5.56%	
Totex out/under performance	-	-	(0.49%)	(0.16%)	2
Retail out/under performance	(0.02%)	(0.08%)	0.02%	(0.02%)	3
Outcome delivery incentives	0.07%	0.19%	(0.19%)	0.02%	4
SIM	-	-	-	-	5
Financing out performance	0.63%	1.61%	2.81%	1.68%	6
Reported RORE	6.30%	7.26%	7.67%	7.08%	7

Narrative:

- 1) The business retail margin assumed in the base case RORE has been removed, following the transfer of the non-household retail business to the Water Plus joint venture on 1 June 2016.
- 2) We have incurred significantly more wholesale totex in the first three years of the AMP6 period than was assumed in the FD. Despite this acceleration on a like for like basis we are expecting to out perform the allowed totex by c£100 million, although as we are planning to invest an additional c£250 million we expect to report an overspend against the allowed totex of c£150 million. This overspend is assumed to be spread equally between 2017/18 and the remaining two years of the AMP and the 2017/18 proportion of this overspend is included in the above table.
- 3) Costs incurred in household retail have been marginally higher than the final determination allowance across the three years, despite out performing slightly in 2017/18
- 4) Net ODI reward of £2.5 million in 2015/16, £6.7 million reward in 2016/17 and £7.0 million penalty in 2017/18
- 5) Despite our above average performance on qualitative SIM for the three year period, as SIM is a relative intercompany measure, at this stage in the AMP we have not yet presumed any penalty or reward in the RORE calculation.
- 6) The actual real interest rate has been calculated based on U UW's regulatory average net debt for 2017/18 and using average RPI for the year. The 2015/16 and 2016/17 rates were calculated based on U UW's statutory net debt (which includes all derivatives) which, prior to the change in reporting of preference shares (see page 148), provided a better presentation of net debt. Ofwat's base-case RORE was based on a theoretical, efficient company with a notional capital structure and a notional cost of debt. This means that the values are not directly comparable.
- 7) Cumulative RORE represents a simple average of 2015/16, 2016/17 and 2017/18.

Statement of directors' remuneration and standards of performance

All directors of United Utilities Water Limited (UW) are also directors of United Utilities Group PLC (UUG). Further remuneration details including the policy can be found in the annual report and accounts of UUG.

For the purposes of this disclosure, the company's directors can be split into two categories:

- executive directors of UW; and
- non-executive directors of UW.

During the year ended 31 March 2018, the directors have received remuneration linked to levels of performance against service standards in connection with activities subject to price regulation.

Element: purpose and link to strategy	Operation	Opportunity 2017/18	Performance measures
Base salary			
To attract and retain executives of the experience and quality required to deliver the company's strategy.	<p>Reviewed annually.</p> <p>Executive directors will normally receive a salary increase broadly in line with the increase awarded to the general workforce, with higher increases awarded only where there has been a material increase in:</p> <ul style="list-style-type: none"> • the size of the individual's role; • the size of the company (through mergers and acquisitions); or • the pay market for directly comparable companies (for example, companies of a similar size and complexity). 	<p>Steve Mogford:</p> <p>1 April 2017 – 30 August 2017: £727,000. Increased to £745,000 from 1 September 2017.</p> <p>Russ Houlden:</p> <p>1 April 2017- 30 August 2017: £459,000. Increased to £470,500 from 1 September 2017.</p> <p>Steve Fraser:</p> <p>1 April 2017 – 31 July 2017: £320,000. Increased to £405,000 from 1 August 2017 on his appointment to an executive director of UUG. Increased to £435,000 from 1 January 2018 as a result of a material change to the size and scope of his role.</p>	None.
Benefits			
To provide market competitive benefits to help recruit and retain high calibre executive directors.	Provision of benefits such as health benefits, car allowance, life assurance, group income protection, opportunity to join the ShareBuy scheme, travel and communication costs.	See table on executive directors' remuneration 2017/18 below.	None.

Element: purpose and link to strategy	Operation	Opportunity 2017/18	Performance measures
Pension			
To provide a broadly mid-market level of retirement benefits.	<p>Executive directors are offered the choice of:</p> <ul style="list-style-type: none"> a company contribution into a defined contribution pension scheme; or a cash allowance in lieu of pension; or a combination of a company contribution into a defined contribution pension scheme and a cash allowance. 	All executive directors elected to receive a cash allowance of 22% of base salary.	None.
Annual Bonus			
<p>To incentivise performance against personal objectives and selected financial and operational KPIs which are directly linked to business strategy.</p> <p>Deferral of part bonus into shares aligns the interests of executive directors and shareholders.</p>	<p>Steve Mogford and Russ Houlden for the full year ended 31 March 2018, and Steve Fraser for the period since his appointment as an executive director of UUG on 1 August 2017:</p> <ul style="list-style-type: none"> 50% paid as cash. 50% deferred into company shares under the deferred bonus plan (DBP) for three years. <p>Steve Fraser for the period prior to his appointment as an executive director of UUG (1 April 2017 to 31 July 2017):</p> <ul style="list-style-type: none"> 60% paid as cash. 40% deferred into company shares under the DBP for three years. <p>All:</p> <ul style="list-style-type: none"> DBP shares accrue dividend equivalents. Not pensionable. <p>Recovery and withholding provisions apply.</p>	<p>Maximum 130% of salary</p> <p>Note that for Steve Fraser in relation to the period prior to his appointment as an executive director of UUG (1 April 2017 to 31 July 2017): Maximum 90% of salary.</p>	<p>Payments predominantly based on financial and operational performance, with a minority based on achievement of personal objectives.</p> <p>Targets set by reference to the company's financial and operating plans.</p> <p>Detail is set out in table 2017/18 annual bonus below.</p>
Long Term Plan			
To incentivise long term value creation and alignment with longer-term returns to shareholders.	<p>Awards under the Long Term Plan (LTP) are rights to receive company shares, subject to certain performance conditions.</p> <p>Each award is measured over a three year performance period starting at the beginning of the financial year in which awards are granted.</p> <p>An additional two year holding period applies after the end of the three year performance period.</p> <p>Vested shares accrue dividend equivalents.</p> <p>Recovery and withholding provisions apply.</p>	<p>Awards worth 130% of salary.</p> <p>Note that for Steve Fraser the LTP award was granted in the period prior to his appointment as an executive director of UUG (1 April 2017 to 31 July 2017). His award was worth 70% of salary and the additional two year holding period did not apply.</p>	<p>One-third based on total shareholder return (TSR); one-third based on customer service excellence and one-third based on a sustainable dividends performance condition.</p> <p>Any vesting is also subject to the committee being satisfied that the company's performance on these measures is consistent with underlying business performance.</p>

Non-executive directors

As outlined in the UUG Annual Report and Accounts, the non-executive Chairman and non-executive directors do not participate in the company's incentive arrangements (i.e. annual bonus or share schemes) and were paid no remuneration linked to water service standards.

How the standards of performance are assessed

Through the annual bonus and long-term incentive schemes, the executive directors receive remuneration linked to the achievement of performance measures which relate to water service standards in order to provide an incentive for them to deliver improvements in those standards.

In determining the outcome of the incentive schemes, standards of performance are assessed by the United Utilities Group PLC Remuneration Committee (the Committee) to ascertain whether targets have been achieved. In addition, the Committee also considers relevant reports from Ofwat in assessing the achievement of standards of performance.

Executive directors' remuneration 2017/18

	Base salary £ 000	Benefits £ 000	Bonus ⁽¹⁾ £ 000	Long term incentives ⁽²⁾ £ 000	Cash allowance in lieu of pension £ 000	Total £ 000
Steve Mogford	737	29	718	429	162	2,075
Russ Houlden	466	25	450	271	102	1,314
Steve Fraser	384	20	351	102	85	942

Note:

⁽¹⁾ 50 per cent of each executive director's bonus was deferred into shares for three years under the deferred bonus plan (DBP), except for the part of Steve Fraser's bonus that was earned in respect the period 1 April 2017 to 31 July 2017, of which 40 per cent was deferred under the DBP.

⁽²⁾ See below for further detail on the long-term incentives

A recharge of £354,000 during the year ended 31 March 2018 (2017: £317,000) was charged to other companies in the United Utilities group in relation to the provision of executive director services (£305,000) and non-executive director services (£49,000).

2017/18 annual bonus

Measure	Steve Mogford		Russ Houlden		Steve Fraser (1 April 2017 to 31 July 2017)		Steve Fraser (1 August 2017 to 31 March 2018)	
	Max. %	Actual %	Max. %	Actual %	Max. %	Actual %	Max. %	Actual %
Underlying operating profit	30.0	24.3	30.0	24.3	20.0	17.5	30.0	26.2
Customer service in year								
Service Incentive Mechanism – Qualitative	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Service Incentive Mechanism – Quantitative	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Maintaining and enhancing services for customers								
Wholesale outcome delivery incentive (ODI) composite	24.0	11.8	24.0	11.8	24.0	11.8	24.0	11.8
Time, cost and quality of capital programme (TCQi)	20.0	13.8	20.0	13.8	20.0	13.8	20.0	13.8
Personal objectives	10.0	9.0	10.0	8.5	20.0	18.0	10.0	9.0
Total as % bonus maximum	100.0	74.9	100.0	74.4	100.0	77.1	100.0	76.8
Total as % base salary	130.0	97.3	130.0	96.7	90.0	69.3	130.0	99.8
Total £'000		718		450		74		277
Total £'000						351		351

For all of these bonus measures there was a threshold level of performance which triggered a partial payment of bonus with a sliding scale providing for achievement of up to 100 per cent of the relevant element of bonus.

Long-term incentives

Details of UUG shares previously granted to UUW Limited executive directors which vested in 2017/18, or whose performance period ended in 2017/18, are as follows:

Director	Number of shares vesting		Value of shares vesting £'000	
	2015 LTP ¹		2015 LTP ²	
Steve Mogford	59,998		429	
Russ Houlden	37,878		271	
Steve Fraser	14,210		102	

¹ The 2015 Long Term Plan (LTP) awards were granted in July 2015. The performance period started on 1 April 2015 and ended on 31 March 2018. The final outcome for the customer service excellence measure (which forms 33% of the award) will not be known until Ofwat publishes the combined service incentive mechanism (SIM) score for the company and its comparator water companies (expected to be published in late summer 2018). The number and value of the vested 2015 LTP awards in the table above is therefore estimated. Awards granted to Steve Fraser are expected to vest once the combined SIM scores are published. Awards granted to Steve Mogford and Russ Houlden will normally vest in April 2020, following an additional two year holding period. The awards accrue dividend equivalents.

² The value of the 2015 LTP awards has been calculated by multiplying the number of shares vesting by the average share price over the three month period 1 January 2018 to 31 March 2018 (715.8 pence per share)

The performance measures, and estimated achievement against those measures, are summarised below:

Performance measure	Weighting	Estimated achievement
Total Shareholder Return (TSR) over the performance period, relative to the median TSR of FTSE 100 companies (excluding financial services, oil and gas and mining companies)	33.3%	0% out of 33.3%
Sustainable dividends. Dividend growth in each year of the performance period, with an underlying dividend cover underpin	33.3%	33.3% out of 33.3%
Customer service excellence. Ranking for the year ended 31 March 2018 versus 17 other water companies using Ofwat's SIM combined score	33.3%	22.1% out of 33.3%
Total vesting		55.4%

Directors' remuneration 2018/19

Directors' remuneration is expected to operate in a broadly similar way for 2018/19 as for 2017/18.

UUG incentive arrangements will continue to reflect the importance of achieving service standards and performance will again be assessed against a number of key measures including ODIs and service incentive mechanism (SIM) scores, which will be used by Ofwat to assess standards of company performance over the regulatory period 2015-20.

For the long-term incentives granted in 2018 the performance targets for the total shareholder return and customer service measure are expected to be as for the 2017 LTP award, but the committee retains the discretion to adjust the customer service measure and targets once Ofwat's approach to assessing customer service for the regulatory period 2020-25 is agreed. The targets for the sustainable dividends measure will reflect the fact that the performance period starting in 2018 will cross two regulatory periods.

CERTIFICATE UNDER PARAGRAPH 6A.2A OF CONDITION F OF THE APPOINTMENTS TO WATER SERVICES REGULATORY AUTHORITY

- (1) In the opinion of the directors, United Utilities Water Limited will have available to it sufficient financial resources and facilities to enable it to carry out, for at least the next twelve months, the Regulated Activities (including the investment programme necessary to fulfil the company's obligations under the Appointments);
- (2) In the opinion of the directors, United Utilities Water Limited will, for at least the next twelve months, have available to it the management resources and systems of planning and internal control which are sufficient to enable it to carry out those functions; and
- (3) In the opinion of the directors, all contracts entered into with any associated company include all necessary provisions and requirements concerning the standard of service to be supplied to United Utilities Water Limited, to ensure that it is able to meet all its obligations as a water and sewerage undertaker.

STATEMENT UNDER PARAGRAPH 6A.2B(1) OF CONDITION F OF THE APPOINTMENTS

The directors of United Utilities Water Limited hereby state that, in giving the certificate under paragraph 6A.2A of Condition F of the Appointments, the main factors which they have taken into account are:

- the financial position of the business at 31 March 2018 as represented by the statutory and regulatory accounts;
- projected cash flows as represented by the business plan and budget, treasury funding plan and estimated investment and operational requirements for the Regulated Activities;
- the anticipated managerial resources available; and
- the contract provisions with associated companies.

Approved by the Board and signed on its behalf by:

Russ Houlden
Chief Financial Officer

12 June 2018

CERTIFICATE UNDER PARAGRAPH 3.1 OF CONDITION K OF THE APPOINTMENTS

As required in paragraph 3.1 of Condition K of the Licence, the directors state that as at 31 March 2018, had a special administration order been made under Section 23 of the Water Industry Act 1991 in respect of the company, the company would have had available, in their opinion, sufficient rights and assets (not including financial resources) to have enabled the special administrator to manage the affairs, business and properties of the company.

Approved by the Board and signed on its behalf by:

Russ Houlden
Chief Financial Officer

12 June 2018

Pro forma tables not subject to KPMG audit opinion

This section of the UUW Annual Performance Report provides a copy of the two sections of the pro-forma tables that Ofwat require all companies to publish, that have not been subject to financial audit opinion.

The information within these tables has been subject to detailed governance and assurance, with the nature and findings of this assurance being set out in Appendix 1 Assurance summary and findings.

The list of data tables is shown below.

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Pro forma 3B	Sub measure performance table
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Pro forma tables Section 3 Performance summary

Pro forma 3A Outcome performance table

For the 12 months ended 31 March 2018

Row	Unique ID	Performance commitment	Unit	Unit description	Decimal places	2016-17 performance level (for information)	2017-18 performance level - actual	2017-18 CPL met?	2017-18 outperformance payment or underperformance penalty - in period ODI's (indicator)	2017-18 outperformance payment or underperformance penalty - in period ODI's (£m, to 4 dp)	2017-18 outperformance payment or underperformance penalty - ODI's payable at the end of AMP6 (indicator)	2017-18 outperformance payment or underperformance penalty - ODI's payable at the end of AMP6 (£m, to 4 dp)	31 March 2020 forecast - total AMP6 outperformance payment or underperformance penalty (indicator)	31 March 2020 forecast - total AMP6 outperformance payment or underperformance penalty (£m, to 4 dp)
1	PR14UUWSW_A1	A1: Drinking Water Safety Plan risk score	score	Drinking Water Safety Plan (DWSP) risk score	1	4.3	4.3	Yes	-	0.0000	-	0.0000	-	0.0000
2	PR14UUWSW_A2	A2: Water quality events DWI category 3 or above	nr	No. water quality events DWI cat 3 or above	0	22	27	No	-	0.0000	Underperformance penalty	-0.7450	Underperformance penalty	-3.8740
3	PR14UUWSW_A3	A3: Water Quality Service Index	score	Water Quality Service Index (UU bespoke)	3	116.923	98.645	No	-	0.0000	Underperformance penalty	-3.6190	Underperformance penalty	-14.2492
4	PR14UUWSW_B1	B1: Average minutes supply lost per property (a year)	time	Mins.secs supply lost per property per year	mins.secs	13:33	13:09	No	-	0.0000	Underperformance penalty	-5.9616	Underperformance penalty	-4.6356
5	PR14UUWSW_B2	B2: Reliable water service index	score	Reliable water service index (UU bespoke)	3	77.840	70.827	No	-	0.0000	Underperformance penalty	-7.9740	Underperformance penalty	-31.8960
6	PR14UUWSW_B3	B3: Security of supply index (SoSI)	score	Security of Supply Index (SOSI)	3	100.000	100.000	Yes	-	0.0000	-	0.0000	-	0.0000
7	PR14UUWSW_B4	B4: Total leakage at or below target	nr	Megalitres per day (M/d) variance from target	2	23.43	9.10	Yes	-	0.0000	Outperformance payment deadband	0.0000	Outperformance payment	12.4391
8	PR14UUWSW_B5	B5: Resilience of impounding reservoirs	nr	Aggregate (cumulative) reduction in risk	2	164.25	165.42	Yes	-	0.0000	-	0.0000	-	0.0000
9	PR14UUWSW_B6	B6: Thirlmere transfer into West Cumbria	%	% project complete based on earned value tied to milestones	0	5	25	Yes	-	0.0000	-	0.0000	Outperformance payment	21.2003
10	PR14UUWSW_C1	C1: Contribution to rivers improved - water programme (NEP schemes and abstraction changes at 4 AIM sites)	nr	Kilometres (km) of river improved (cumulative)	1	82.6	80.6	Yes	-	0.0000	Outperformance payment	0.1848	-	0.6331
11	PR14UUWSW_D1	D1: Delivering our commitments to developers, local authorities and highway authorities	%	% of jobs completed within response times	0	98	94	Yes	-	0.0000	-	0.0000	-	0.0000
12	PR14UUWSW_E1	E1: Number of free water meters installed	nr	No. of free water meters installed per year	0	32,447	36,615	No	-	0.0000	-	0.0000	-	0.0000
13	PR14UUSWW_S-A1	S-A1: Private sewers service index	score	Private sewers service index (UU bespoke)	2	91.90	85.00	Yes	-	0.0000	Outperformance payment	7.3761	Outperformance payment	36.8541
14	PR14UUSWW_S-A2	S-A2: Wastewater network performance index	score	Wastewater network performance index (UU bespoke)	2	89.47	86.17	Yes	-	0.0000	-	0.0000	-	0.0000
15	PR14UUSWW_S-B1	S-B1: Future flood risk	nr	No. of properties at risk	0	16,418	16,395	No	-	0.0000	-	0.0000	-	0.0000
16	PR14UUSWW_S-B2	S-B2: Sewer flooding index	score	Sewer flooding index (UU bespoke)	1	94.4	70.0	Yes	-	0.0000	-	0.0000	Underperformance penalty	-19.1620
17	PR14UUSWW_S-C1	S-C1: Contribution to bathing waters improved (includes NEP phase 3&4 bathing water intermittent discharge projects)	nr	Bathing water equivalent (BWE)	2	0.66	1.49	Yes	-	0.0000	-	0.0000	-	0.0000
18	PR14UUSWW_S-D1	S-D1: Protecting rivers from deterioration due to population growth (includes Davyhulme non-delivery penalty)	nr	Kilometers (km) rivers protected from deterioration	1	48.0	210.5	Yes	-	0.0000	-	0.0000	-	0.0000
19	PR14UUSWW_S-D2	S-D2: Maintaining our wastewater treatment works (includes Oldham and Royton WWTs special cost factor claims)	score	Maintaining WWTs index (UU bespoke)	4	58.7082	30.4680	Yes	-	0.0000	-	0.0000	Underperformance penalty	-4.3900
20	PR14UUSWW_S-D3	S-D3: Contribution to rivers improved - wastewater programme (includes Oldham, Royton and Windermere)	nr	Kilometres (km) of river improved (cumulative)	2	45.62	120.75	Yes	-	0.0000	Outperformance payment	0.4300	Outperformance payment	0.8400
21	PR14UUSWW_S-D4a	S-D4a: Wastewater serious (category 1 and 2) pollution incidents	nr	No. of pollution incidents (cats 1 and 2)	0	2	0	Yes	-	0.0000	-	0.0000	-	0.0000
22	PR14UUSWW_S-D4b	S-D4b: Wastewater category 3 pollution incidents	nr	No. of pollution incidents (cat 3)	0	150	129	Yes	-	0.0000	Outperformance payment	3.2780	Outperformance payment	16.3900
23	PR14UUSWW_S-D5	S-D5: Satisfactory sludge disposal	%	% satisfactory sludge disposal compliance	2	100.00	100.00	Yes	-	0.0000	-	0.0000	-	0.0000
24	PR14UUHHR_A-1	A-1: Service incentive mechanism (SIM)	text	Service incentive mechanism (SIM) score ranking	na	85.44	86.87	-	-	0.0000	-	0.0000	-	0.0000
25	PR14UUHHR_R-A2	R-A2: Customer experience programme	£m	£ million cumulative depreciation	3	0.363	2.576	No	-	0.0000	-	0.0000	Underperformance penalty	-4.7384
26	PR14UUHHR_B1	B1: Customers saying that we offer value for money	%	% customer satisfaction	0	52	52	Yes	-	0.0000	-	0.0000	-	0.0000
27	PR14UUHHR_B2	B2: Per household consumption	nr	Litres per household per day (l/h/d)	0	305	311	No	-	0.0000	-	0.0000	-	0.0000

Key to cells:

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Pro forma 3B Sub measure performance table

For the 12 months ended 31 March 2018

Row	Unique ID	PC/sub-measure ID	PC / sub-measure	Unit	Decimal places	2016-17 performance level - actual	2017-18 performance level - actual	2017-18 CPL met?
1	PR14UWSW_A3	00	A3: Water Quality Service Index	score	3	116.923	98.64549438	No
2	PR14UWSW_A3	01	WTW coliform non-compliance (%)	%	2	0.01	0.01	Yes
3	PR14UWSW_A3	02	SR integrity index	%	2	99.98	99.97	Yes
4	PR14UWSW_A3	03	No. of WTW turbidity fails	nr	0	2.00	1.00	Yes
5	PR14UWSW_A3	04	Mean Zonal Compliance (MZC)	%	2	99.96	99.97	No
6	PR14UWSW_A3	05	Distribution Maintenance Index (%)	%	2	99.85	99.89	Yes
7	PR14UWSW_A3	06	Unwanted customer contacts for water quality (nr per year)	nr	0	9605	11652	No
8	PR14UWSW_B2	00	B2: Reliable water service index	score	3	77.84	19.50	No
9	PR14UWSW_B2	01	Total bursts (nr/annum)	nr	0	4590	4484	Yes
10	PR14UWSW_B2	02	Interruptions >12hours (nr of properties/total nr of properties)	nr	0	3759	4631	No
11	PR14UWSW_B2	03	Pressure (nr of properties on DG2 register/ total number of properties)	nr	0	345	278	No
12	PR14UWSW_B2	04	Customer contacts for water availability (contacts/annum)	nr	0	43740	46487	Yes
13	PR14UWSWW_S-A1	00	S-A1: Private sewers service index	score	2	91.9	84.996	Yes
14	PR14UWSWW_S-A1	01	Blockages	nr	0	14031	13809	Yes
15	PR14UWSWW_S-A1	02	Collapses	nr	0	391	302	Yes
16	PR14UWSWW_S-A1	03	Pollution incidents	nr	0	1.0	4.0	Yes
17	PR14UWSWW_S-A1	04	Properties flooded internally	nr	0	415	276	Yes
18	PR14UWSWW_S-A1	05	Areas flooded externally	nr	0	4599	3901	Yes
19	PR14UWSWW_S-A2	00	S-A2: Wastewater network performance index	score	2	89.47	86.169	Yes
20	PR14UWSWW_S-A2	01	Blockages	nr	0	7469	7047	Yes
21	PR14UWSWW_S-A2	02	Collapses	nr	0	268	232	Yes
22	PR14UWSWW_S-A2	03	Rising main bursts	nr	0	46	47	No
23	PR14UWSWW_S-A2	04	Equipment failures	nr	0	2322	3038	No
24	PR14UWSWW_S-B2	00	S-B2: Sewer flooding index	score	1	94.4	69.99	Yes
25	PR14UWSWW_S-B2	01	Properties flooded due to other causes	nr	0	794	559	No
26	PR14UWSWW_S-B2	02	Properties flooded due to hydraulic overload	nr	0	147	91	No
27	PR14UWSWW_S-B2	03	Areas flooded due to other causes	nr	0	3274	2863	Yes
28	PR14UWSWW_S-B2	04	Areas flooded due to hydraulic overload	nr	0	215	212	Yes
29	PR14UWSWW_S-B2	05	Incidents of repeat flooding	nr	0	362	206	Yes
30	PR14UWSWW_S-D2	00	S-D2: Maintaining our wastewater treatment works	score	4	58.7082	30.468	Yes
31	PR14UWSWW_S-D2	01	WwTWs failing EA permit - small (size band 1-4)	score	4	2.00	12.29	Yes
32	PR14UWSWW_S-D2	02	WwTWs failing EA permit - medium (size band 5)	score	4	0	0	Yes
33	PR14UWSWW_S-D2	03	WwTWs failing EA permit - large (size band 6a)	score	4	3.000	16.387	Yes
34	PR14UWSWW_S-D2	04	WwTWs failing EA permit - large (size band 6b)	score	4	0	0	Yes
35	PR14UWSWW_S-D2	05	WwTWs at high risk of failing EA permit - small (size band 1-4)	score	4	0.1159	0.1603	Yes
36	PR14UWSWW_S-D2	06	WwTWs at high risk of failing EA permit - medium (size band 5)	score	4	0.0341	0.0956	Yes
37	PR14UWSWW_S-D2	07	WwTWs at high risk of failing EA permit - large (size band 6)	score	4	0	0	Yes
38	PR14UWSWW_S-D2	08	WwTWs at medium risk of failing EA permit - small (size band 1-4)	score	4	0.3104	0.3204	Yes
39	PR14UWSWW_S-D2	09	WwTWs at medium risk of failing EA permit - medium (size band 5)	score	4	0.041	0.0546	Yes
40	PR14UWSWW_S-D2	10	WwTWs at medium risk of failing EA permit - large (size band 6)	score	4	0.8874	0.7507	Yes

Key to cells:

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Calculation cell

For line definitions see Excel version of the data tables

Pro forma 3C AIM table

For the 12 months ended 31 March 2018

Row	Abstraction site	Decimal places	2017-18 AIM performance [M]	2017-18 normalised AIM performance [nr]	Cumulative AIM performance 2016-17 onwards [M]	Cumulative normalised AIM performance 2016-17 onwards [nr]	Contextual information relating to AIM performance
1	Aughertree Springs (Quarry Hill system, West Cumbria Resource Zone)	2	0.0	0.00	0.0	0.00	River flows did not fall to the AIM low flow threshold during FY2018
2	River Calder (Barnacre system, Integrated Resource Zone)	2	0.0	0.00	0.0	0.00	River flows did not fall to the AIM low flow threshold during FY2018
3	Ennerdale (West Cumbria Resource Zone)	2	-23.33	-0.10	-23.33	-0.10	River flows breached the AIM flow trigger for 9 days (6 to 14 May 2017)
4	Old Water, River Gelt (Castle Carrock system, Carlisle Resource Zone)	2	0.0	0.00	0.0	0.00	River flows did not fall to the AIM low flow threshold during FY2018
Total		2	-23.3	-0.10	-23.3	-0.10	

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For line definitions see Excel version of the data tables

Pro forma 3D SIM table

For the 12 months ended 31 March 2018

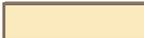
Line description	Units	DPs	Score
------------------	-------	-----	-------

A	Qualitative performance			
3D.1	1st survey score	nr	2	4.36
3D.2	2nd survey score	nr	2	4.44
3D.3	3rd survey score	nr	2	4.54
3D.4	4th survey score	nr	2	4.61
3D.5	Qualitative SIM score (out of 75)	nr	2	65.41

B	Quantitative performance			
3D.6	Total contact score	nr	2	70.80
3D.7	Quantitative SIM score (out of 25)	nr	2	21.46

C	SIM score			
3D.8	Total annual SIM score (out of 100)	nr	2	86.87

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma tables Section 4 Additional regulatory information

Pro forma 4A – Non-financial information

For the 12 months ended 31 March 2018

Line description	Units	DPs	Current year	
			Unmeasured	Measured

Retail					
A	Household				
4A.1	Number of void households	000s	3	143.506	72.435
4A.2	Per capita consumption (excluding supply pipe leakage) l/h/d	l/h/d	2	154.14	122.63

Water	Wastewater
-------	------------

Wholesale					
B	Volume (Ml/d)				
4A.3	Bulk supply export	M/d	3	12.726	0.349
4A.4	Bulk supply import	M/d	3	0.705	0.000
4A.5	Distribution input	M/d	3	1,768.967	

Key to cells:

 Input cell

 Calculation cell

For line definitions see Excel version of the data tables

Pro forma 4B Totex analysis

For the 12 months ended 31 March 2018

Line description		Units	DPs	Current year		Cumulative 2015-20	
				Water	Wastewater	Water	Wastewater
A Actual totex							
4B.1	Actual totex	£m	3	601.498	711.578	1733.363	2121.337
B Items excluded from the menu							
4B.2	Third party costs	£m	3	1.169	0.262	6.417	0.262
4B.3	Pension deficit recovery payments	£m	3	16.210	15.162	44.227	41.367
4B.4	Other 'Rule book' adjustments	£m	3	1.705	0.288	28.505	2.963
4B.5	Total items excluded from the menu	£m	3	19.084	15.712	79.149	44.592
C Transition expenditure							
4B.6	Transition expenditure	£m	3	0.000	0.000	10.794	16.972
D Adjusted Actual totex							
4B.7	Adjusted Actual totex	£m	3	582.414	695.866	1665.008	2093.716
4B.8	Adjusted Actual totex base year prices	£m	3	518.362	619.338	1,527.992	1,924.173
E Allowed totex							
4B.9	Allowed totex based on final menu choice – base year prices	£m	3	470.600	627.300	1388.400	1755.000

Key to cells:

Input cell

Calculation cell

For line definitions see Excel version of the data tables

Pro forma 4C Impact of AMP performance to date on RCV

For the 12 months ended 31 March 2018

Line description		Units	DPs	Water	Wastewater
4C.1	Cumulative totex over/underspend so far in the price control period	£m	3	157.202	190.595
4C.2	Customer share of cumulative totex over/underspend	£m	3	78.453	92.919
4C.3	RCV element of customer share of cumulative totex over/underspend	£m	3	59.367	109.550
4C.4	Adjustment for ODI rewards or penalties	£m	3	0.000	35.280
4C.5	RCV determined at FD at 31 March	£m	3	3942.033	7067.909
4C.6	Projected 'shadow' RCV	£m	3	4001.400	7212.740

Key to cells:

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Calculation cell

For line definitions see Excel version of the data tables

Pro forma 4D Totex analysis – wholesale water

For the 12 months ended 31 March 2018

Line description	Units	DPs	Water resources		Network+				Total	
			Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution		
A Operating expenditure										
4D.1	Power	£m	3	0.000	4.516	4.209	0.088	13.666	8.544	31.022
4D.2	Income treated as negative expenditure	£m	3	0.000	-0.014	-0.232	0.000	-0.233	0.000	-0.479
4D.3	Abstraction charges/ discharge consents	£m	3	14.197	2.368	0.000	0.000	0.219	0.000	16.784
4D.4	Bulk supply	£m	3	0.000	0.000	0.000	0.000	0.000	0.262	0.262
4D.5	Other operating expenditure - renewals expensed in year (Infrastructure)	£m	3	0.000	10.482	0.691	0.000	0.000	87.583	98.756
4D.6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.7	Other operating expenditure - excluding renewals	£m	3	-0.155	10.447	6.921	0.484	63.131	48.275	129.102
4D.8	Local authority and Cumulo rates	£m	3	0.000	16.511	2.606	0.473	7.245	32.954	59.788
4D.9	Total operating expenditure excluding third party services	£m	3	14.042	44.308	14.195	1.045	84.028	177.618	335.235
4D.10	Third party services	£m	3	0.000	0.006	0.667	0.000	0.161	0.335	1.169
4D.11	Total operating expenditure	£m	3	14.042	44.314	14.862	1.045	84.189	177.953	336.404
B Capital Expenditure										
4D.12	Maintaining the long term capability of the assets - infra	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.13	Maintaining the long term capability of the assets - non-infra	£m	3	0.000	4.639	0.609	0.000	82.001	41.025	128.274
4D.14	Other capital expenditure - infra	£m	3	0.000	0.113	23.920	0.000	0.000	72.663	96.697
4D.15	Other capital expenditure - non-infra	£m	3	0.000	3.945	0.049	0.000	17.624	23.589	45.207
4D.16	Infrastructure network reinforcement	£m	3	0.000	0.000	0.000	0.000	0.000	1.448	1.448
4D.17	Total gross capital expenditure (excluding third party)	£m	3	0.000	8.697	24.578	0.000	99.625	138.725	271.625
4D.18	Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.19	Total gross capital expenditure	£m	3	0.000	8.697	24.578	0.000	99.625	138.725	271.625
C Grants and contributions										
4D.20	Grants and contributions	£m	3	0.000	0.000	0.000	0.000	0.000	22.742	22.742
4D.21	Totex	£m	3	14.042	53.011	39.440	1.045	183.814	293.936	585.288
D Cash Expenditure										
4D.22	Pension deficit recovery payments	£m	3	0.000	1.416	1.320	0.103	7.863	5.509	16.210
4D.23	Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4D.24	Totex including cash items	£m	3	14.042	54.427	40.760	1.147	191.677	299.446	601.498
E Unit cost information (operating expenditure)										
4D.25	Licenced volume available	M	3	2514214.460						
4D.25	Volume abstracted	M	3		723048.100					
4D.25	Volume transported	M	3			683063.110				
4D.25	Average volume stored	M	3				576.900			
4D.25	Distribution input volume	M	3					645673.025		
4D.25	Distribution input volume	M	3						645673.025	
4D.26	Unit cost	£/Ml	3	5.585	61.288	21.757	1810.978	130.389	275.609	
4D.27	Population	000s	3	7200.534	7200.534	7200.534	7200.534	7200.534	7200.534	
4D.28	Unit cost	£/pop	3	1.950	6.154	2.064	0.145	11.692	24.714	

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma 4E Totex analysis – wholesale wastewater

For the 12 months ended 31 March 2018

Line description	Units	DPs	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		
A Operating expenditure												
4E.1	Power	£m	3	2,935	3,603	1,437	40,494	2,147	0,008	-5,513	0,725	45,836
4E.2	Income treated as negative expenditure	£m	3	-0,009	-0,011	-0,004	-0,140	-0,001	0,000	-8,601	0,000	-8,766
4E.3	Discharge consents	£m	3	0,852	1,059	0,422	4,585	0,000	0,000	0,300	0,000	7,218
4E.4	Bulk discharge	£m	3	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4E.5	Other operating expenditure - renewals expensed in year (Infrastructure)	£m	3	22,956	28,554	11,384	0,000	0,000	0,843	0,000	0,000	63,737
4E.6	Other operating expenditure - renewals expensed in year (Non-Infrastructure)	£m	3	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4E.7	Other operating expenditure - excluding renewals	£m	3	18,177	14,968	6,045	73,875	0,628	6,582	28,591	6,441	155,306
4E.8	Local authority rates and Cumulo rates	£m	3	0,027	0,025	0,010	22,937	0,232	0,069	6,232	0,774	30,307
4E.9	Total operating expenditure excluding third party services	£m	3	44,939	48,198	19,293	141,752	3,005	7,502	21,009	7,941	293,639
4E.10	Third party services	£m	3	0,070	0,064	0,026	0,067	0,000	0,000	0,036	0,000	0,262
4E.11	Total operating expenditure	£m	3	45,009	48,262	19,318	141,819	3,005	7,502	21,045	7,941	293,901
B Capital Expenditure												
4E.12	Maintaining the long term capability of the assets - infra	£m	3	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4E.13	Maintaining the long term capability of the assets - non-infra	£m	3	41,462	0,000	0,000	151,266	0,000	0,000	18,826	3,638	215,193
4E.14	Other capital expenditure - infra	£m	3	112,410	4,214	0,000	0,000	0,000	-0,671	0,000	0,000	115,954
4E.15	Other capital expenditure - non-infra	£m	3	9,412	1,365	0,000	71,747	0,000	0,000	1,821	0,000	84,345
4E.16	Infrastructure network reinforcement	£m	3	2,575	0,000	0,000	0,000	0,000	0,000	0,000	0,000	2,575
4E.17	Total gross capital expenditure (excluding third party services)	£m	3	165,859	5,579	0,000	223,013	0,000	-0,671	20,647	3,638	418,065
4E.18	Third party services	£m	3	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4E.19	Total gross capital expenditure	£m	3	165,859	5,579	0,000	223,013	0,000	-0,671	20,647	3,638	418,065
C Grants and contributions												
4E.20	Grants and contributions	£m	3	5,631	6,921	2,759	0,239	0,000	0,000	0,000	0,000	15,550
4E.21	Totex	£m	3	205,237	46,920	16,559	364,593	3,005	6,831	41,691	11,579	696,416
C Cash Expenditure												
4E.22	Pension deficit recovery payments	£m	3	1,700	1,557	0,621	7,531	0,000	0,752	2,531	0,471	16,162
4E.23	Other cash items	£m	3	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000
4E.24	Totex including cash items	£m	3	206,937	48,477	17,180	372,124	3,005	7,583	44,223	12,050	711,578
D Unit cost information (operating expenditure)												
4E.25	Volume collected	M	3	439330.888								
4E.25	Volume collected	M	3		526321.659							
4E.25	Volume collected	M	3			209876.416						
4E.25	Biochemical Oxygen Demand (BOD)	Tonnes	3				201141.435					
4E.25	Biochemical Oxygen Demand (BOD)	Tonnes	3					12561.000				
4E.25	Volume transported	m3	3						1789223.040			
4E.25	Dried solid mass treated	ttds	3							190,234		
4E.25	Dried solid mass disposed	ttds	3								83,547	
4E.26	Unit cost	£/unit	3	102,448	91,697	92,046	705,069	239,251	4,193	110,625,020	950,45,838	
4E.27	Population	000s	3	7559,970	7559,970	7559,970	7559,970	7559,970	7559,970	7559,970	7559,970	
4E.28	Unit cost	£/pop	3	5,954	6,384	2,555	18,759	0,398	0,992	2,784	1,050	

Key to cells:

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Calculation cell

For line definitions see Excel version of the data tables

Pro forma 4F Cost analysis – household retail

For the 12 months ended 31 March 2018

Line description	Units	DPs	Household unmeasured				Household measured				Total	
			Water only	Wastewater only	Water and wastewater	Total	Water only	Wastewater only	Water and wastewater	Total		
A	Operating expenditure											
4F.1	Customer services	£m	3	0.184	0.085	12.807	13.075	0.182	0.002	11.378	11.563	24.638
4F.2	Debt management	£m	3	0.016	0.011	8.430	8.456	0.016	0.001	3.032	3.049	11.506
4F.3	Doubtful debts	£m	3	0.093	0.022	34.631	34.747	0.073	0.000	15.570	15.643	50.390
4F.4	Meter reading	£m	3					0.086	0.157	3.745	3.988	3.988
4F.5	Other operating expenditure	£m	3	0.219	0.116	8.746	9.080	0.136	0.236	6.197	6.570	15.650
4F.6	Total operating expenditure excluding third party services	£m	3	0.511	0.233	64.614	65.359	0.495	0.396	39.922	40.813	106.172
4F.7	Third party services operating expenditure	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4F.8	Total operating expenditure	£m	3	0.511	0.233	64.614	65.359	0.495	0.396	39.922	40.813	106.172
4F.9	Depreciation - tangible fixed assets (on assets existing at 31 March 2015)	£m	3	0.021	0.011	0.764	0.796	0.013	0.023	0.559	0.595	1.391
4F.10	Depreciation - tangible fixed assets (on assets acquired since 1 April 2015)	£m	3	0.008	0.005	0.316	0.329	0.006	0.008	0.262	0.275	0.604
4F.11	Amortisation - intangible fixed assets (on assets existing at 31 March 2015)	£m	3	0.041	0.022	1.718	1.782	0.027	0.043	1.238	1.308	3.090
4F.12	Amortisation - intangible fixed assets (on assets acquired since 1 April 2015)	£m	3	0.024	0.013	1.315	1.352	0.019	0.018	0.975	1.012	2.364
4F.13	Total operating costs	£m	3	0.605	0.284	68.729	69.618	0.560	0.488	42.955	44.002	113.621
4F.14	Capital expenditure	£m	3	0.063	0.035	3.804	3.901	0.041	0.066	2.213	2.320	6.221
B	Demand-side efficiency and customer-side leaks analysis - Household											
4F.15	Demand-side water efficiency - gross expenditure	£m	3									1.016
4F.16	Demand-side water efficiency - expenditure funded by wholesale	£m	3									0.219
4F.17	Demand-side water efficiency - net retail expenditure	£m	3									0.797
4F.18	Customer-side leak repairs - gross expenditure	£m	3									1.504
4F.19	Customer-side leak repairs - expenditure funded by wholesale	£m	3									0.000
4F.20	Customer-side leak repairs - net retail expenditure	£m	3									1.504

Key to cells:

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For line definitions see Excel version of the data tables

Pro forma 4G Wholesale current cost financial performance

For the 12 months ended 31 March 2018

Line description		Units	DPs	Water	Wastewater	Total
4G.1	Revenue	£m	3	723.052	875.840	1598.893
4G.2	Operating expenditure	£m	3	-336.404	-293.901	-630.305
4G.3	Capital maintenance charges	£m	3	-159.665	-293.285	-452.950
4G.4	Other operating income	£m	3	-1.536	-4.873	-6.409
4G.5	Current cost operating profit	£m	3	225.447	283.782	509.229
4G.6	Other income	£m	3	15.328	11.520	26.849
4G.7	Interest income	£m	3	1.096	1.947	3.043
4G.8	Interest expense	£m	3	-105.611	-187.778	-293.389
4G.9	Other interest expense	£m	3	1.980	3.520	5.500
4G.10	Current cost profit before tax and fair value movements	£m	3	138.241	112.991	251.232
4G.11	Fair value gains/(losses) on financial instruments	£m	3	9.776	17.381	27.157
4G.12	Current cost profit before tax	£m	3	148.017	130.372	278.389

Key to cells:

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Calculation cell

For line definitions see Excel version of the data tables

Pro forma 4H Financial Metrics

For the 12 months ended 31 March 2018*

Line description		Units	DPs	Metric
A	Financial indicators			
4H.1	Net debt	£m	3	7122.300
4H.2	Regulated equity	£m	3	3887.643
4H.3	Regulated gearing	%	2	64.69%
4H.4	Post tax return on regulated equity	%	2	8.15%
4H.5	RORE (return on regulated equity)	%	2	7.08%
4H.6	Dividend yield	%	2	8.00%
4H.7	Retail profit margin - Household	%	2	-0.19%
4H.8	Retail profit margin - Non household	%	2	1.24%
4H.9	Credit rating	Text	n/a	A- Stable
4H.10	Return on RCV	%	2	5.62%
4H.11	Dividend cover	dec	2	0.97
4H.12	Funds from operations (FFO)	£m	3	783.724
4H.13	Interest cover (cash)	dec	2	6.04
4H.14	Adjusted interest cover (cash)	dec	2	2.98
4H.15	FFO/Debt	dec	2	0.11
4H.16	Effective tax rate	%	2	7.43%
4H.17	RCF	£m	3	472.668
4H.18	RCF/capex	dec	2	0.65
B	Revenue and earnings			
4H.19	Revenue (actual)	£m	3	1706.757
4H.20	EBITDA (actual)	£m	3	976.146
C	Borrowings			
4H.21	Proportion of borrowings which are fixed rate	%	2	33.48%
4H.22	Proportion of borrowings which are floating rate	%	2	17.97%
4H.23	Proportion of borrowings which are index linked	%	2	48.56%
4H.24	Proportion of borrowings due within 1 year or less	%	2	6.28%
4H.25	Proportion of borrowings due in more than 1 year but no more than 2 years	%	2	8.98%
4H.26	Proportion of borrowings due in more than 2 years but but no more than 5 years	%	2	23.23%
4H.27	Proportion of borrowings due in more than 5 years but no more than 20 years	%	2	40.63%
4H.28	Proportion of borrowings due in more than 20 years	%	2	20.88%

Key to cells:

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For line definitions see Excel version of the data tables

*With the exception of RORE which is presented on a cumulative basis for the three years ended 31 March 2018. 2015/16 RORE was 6.30%, 2016/17 RORE was 7.26% and 2017/18 RORE was 7.67%.

Line 15 – FFO / debt of 11.0% is calculated in accordance with the Ofwat line definition. UUW's FFO/Debt applying Standard & Poor's (S&P) calculation method would equal 9.7%. The main difference is that the S&P FFO definition includes all interest, whereas the Ofwat FFO definition includes just cash interest, so would exclude all interest on index-linked debt.

Section C – Borrowings represents the notional value in the company's statutory accounts and does not take account of the impact on interest of derivative instruments.

Lines 21-23 – The proportion of borrowings between fixed, floating and index-linked does not take into account any hedging arrangements and is not reflective of the overall portfolio.

Pro forma 4I Financial Derivatives

For the 12 months ended 31 March 2018

Line description	Units	DPs	Nominal value by maturity (net)			Total value at 31 March 2018		Total accretion at 31 March 2018	Units	DPs	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	
Derivative type													
A Interest rate swap (sterling)													
41.1	Floating to fixed rate	£m	3	902.104	1129.234	925.000	2956.338	-44.379	0.000	%	2	2.00%	1.54%
41.2	Floating from fixed rate	£m	3	-150.000	-375.000	-800.000	-1325.000	224.070	0.000	%	2	1.11%	0.24%
41.3	Floating to index linked	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.4	Floating from index linked	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.5	Fixed to index-linked	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.6	Fixed from index-linked	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.7	Total	£m	3	752.104	754.234	125.000	1631.338	179.692	0.000				
B Foreign Exchange													
41.8	Cross currency swap USD	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.9	Cross currency swap EUR	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.10	Cross currency swap YEN	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.11	Cross currency swap Other	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.12	Total	£m	3	0.000	0.000	0.000	0.000	0.000	0.000				
C Currency interest rate													
41.13	Currency interest rate swaps USD	£m	3	0.000	0.000	202.104	202.104	152.421	0.000	%	2	1.28%	0.07%
41.14	Currency interest rate swaps EUR	£m	3	423.657	0.000	156.790	580.447	61.077	0.000	%	2	0.97%	0.24%
41.15	Currency interest rate swaps YEN	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.71%	0.12%
41.16	Currency interest rate swaps Other	£m	3	0.000	0.000	254.191	254.191	27.613	0.000	%	2	1.47%	2.79%
41.17	Total	£m	3	423.657	0.000	613.085	1036.742	241.112	0.000				
D Forward currency contracts													
41.18	Forward currency contracts USD	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.19	Forward currency contracts EUR	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.20	Forward currency contracts YEN	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.21	Forward currency contracts Other	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	%	2	0.00%	0.00%
41.22	Total	£m	3	0.000	0.000	0.000	0.000	0.000	0.000				
E Other financial derivatives													
41.23	Other financial derivatives	£m	3	0.000	0.000	0.000	0.000	-5.595	0.000	%	2	0.00%	0.00%
F Total													
41.24	Total financial derivatives	£m	3	1175.761	754.234	738.085	2668.080	415.209	0.000				

Key to cells:

Input cell

Calculation cell

For line definitions see Excel version of the data tables

The inclusion of all 'other' interest rate swaps in one line in the table (line 16) makes the calculation of a meaningful weighted average interest rate problematic. We would recommend that the weighted average interest rate is better represented by splitting the four swaps that make up the balance:

- 'RDC' rate: pay 1.13%, receive 5.02% (Notional of £54.2m)
- 'HKD' rate: pay 1.81%, receive 2.90% (Notional of £53.0m)
- 'HKD' rate: pay 1.6%, receive 2.37% (Notional of £78.9m)
- 'HKD' rate: pay 1.30%, receive 2.92% (Notional of £68.1m)

For certain interest rate swaps we have swapped the fixed coupon on the debt (including credit spread) to a floating interest rate plus margin, whereas for other interest rate swaps we have swapped a fixed rate representing underlying interest (i.e. debt coupon less the credit spread) to a floating interest rate without any margin. Therefore certain rates payable/receivable included in the table are market interest rates excluding any element of credit spread, whereas other rates are 'all in' effective interest rates including credit spread. Care should be taken when interpreting the rates in the table.

For certain cross currency swaps that have historically reached mandatory breaks, these have been re-hedged mid-life at on-market rates (at that point). In these scenarios the fair value of the swap would have been paid to / received from the counterparty (affecting the volume of debt), with the rate on the re-hedged swap being amended either up or down accordingly (sometimes significantly so). Therefore the rates payable on these swaps may not reflect the underlying cost of debt (for instance we have some swaps where we receive the debt coupon but pay LIBOR minus a margin and others where we pay LIBOR plus a margin significantly higher than the underlying credit spread), again care should be taken when interpreting the rates in the table.

The interest rates incorporate fixed interest rates which are reflective of the position at the balance sheet date, and floating interest rates based on the last rate reset. As such, these are not representative of our future cost of debt.

The nominal value of the currency swaps reflect the starting receivable amount.

Other financial derivatives (line 23) includes forward swaps and electricity swaps which ensures the table agrees to table 1C:

- Electricity swaps - £0.9m liability
- Forward starting floating to fixed rate swaps - £4.7m liability.

Pro forma 4J Atypical expenditure by business unit - Wholesale water

For the 12 months ended 31 March 2018

Line description	Units	DPs	Water resources		Network+				Total	
			Abstraction licences	Raw water abstraction	Raw water transport	Raw water storage	Water treatment	Treated water distribution		
A	Operating expenditure (excl. atypicals)									
4J.1	Power	£m	3	0.000	4.516	4.209	0.088	13.666	8.544	31.022
4J.2	Income treated as negative expenditure	£m	3	0.000	-0.014	-0.232	0.000	-0.233	0.000	-0.479
4J.3	Abstraction charges/ discharge consents	£m	3	14.197	2.368	0.000	0.000	0.219	0.000	16.784
4J.4	Bulk supply	£m	3	0.000	0.000	0.000	0.000	0.000	0.262	0.262
	Other operating expenditure									
4J.5	- Renewals expensed in year (Infrastructure)	£m	3	0.000	10.448	0.691	0.000	0.000	87.125	98.264
4J.6	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.7	- Other operating expenditure excluding renewals	£m	3	-0.155	10.447	6.921	0.484	63.185	48.275	129.156
4J.8	Local authority and Cumulo rates	£m	3	0.000	17.722	2.796	0.510	7.752	35.409	64.188
4J.9	Total operating expenditure (excluding third party services)	£m	3	14.042	45.486	14.385	1.082	84.588	179.615	339.197
4J.10	Third party services	£m	3	0.000	0.006	0.667	0.000	0.161	0.335	1.169
4J.11	Total operating expenditure	£m	3	14.042	45.492	15.052	1.082	84.749	179.950	340.366
B	Capital expenditure (excl. atypicals)									
4J.12	Maintaining the long term capability of the assets - infra	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.13	Maintaining the long term capability of the assets - non-infra	£m	3	0.000	3.410	0.609	0.000	82.001	41.025	127.045
4J.14	Other capital expenditure - infra	£m	3	0.000	0.113	23.920	0.000	0.000	72.663	96.697
4J.15	Other capital expenditure - non-infra	£m	3	0.000	3.857	0.049	0.000	17.624	23.589	45.119
4J.16	Infrastructure network reinforcement	£m	3	0.000	0.000	0.000	0.000	0.000	1.448	1.448
4J.17	Total gross capital expenditure excluding third party services	£m	3	0.000	7.380	24.578	0.000	99.625	138.725	270.309
4J.18	Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.19	Total gross capital expenditure	£m	3	0.000	7.380	24.578	0.000	99.625	138.725	270.309
4J.20	Grants and contributions	£m	3	0.000	0.000	0.000	0.000	0.000	22.742	22.742
4J.21	Totex	£m	3	14.042	52.872	39.630	1.082	184.374	295.934	587.933
C	Cash expenditure (excl. atypicals)									
4J.22	Pension deficit recovery payments	£m	3	0.000	1.416	1.320	0.103	7.863	5.509	16.210
4J.23	Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.24	Totex including cash items	£m	3	14.042	54.288	40.950	1.184	192.237	301.443	604.143
D	Atypical expenditure									
4J.25	Storm Impact (opex excluding IRE)	£m	3	0.000	0.000	0.000	0.000	-0.053	0.000	-0.054
4J.26	Storm Impact (IRE)	£m	3	0.000	0.033	0.000	0.000	0.000	0.458	0.491
4J.27	Storm Damage (capex)	£m	3	0.000	1.317	0.000	0.000	0.000	0.000	1.317
4J.28	2005 Cumulo Rates Refund	£m	3	0.000	-1.211	-0.190	-0.037	-0.507	-2.456	-4.400
4J.29	Item 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.30	Item 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.31	Item 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.32	Item 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.33	Item 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.34	Item 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4J.35	Total atypical expenditure	£m	3	0.000	0.139	-0.190	-0.037	-0.560	-1.998	-2.646
E	Total expenditure									
4J.36	Total expenditure	£m	3	14.042	54.427	40.760	1.147	191.677	299.445	601.498

Key to cells:

Input cell

Calculation cell

For line definitions see Excel version of the data tables

Pro forma 4K Atypical expenditure by business unit - Wholesale wastewater

For the 12 months ended 31 March 2018

Line description	Units	DPs	Network+			Sewage Collection		Network+		Sewage			Sludge			Total
			Foul	Surface water drainage	Highway drainage	Sewage treatment and disposal	Sludge liquor treatment	Sludge transport	Sludge treatment	Sludge disposal						
A	Operating expenditure (excl. atypicals)															
4K.1	Power	£m	3	2.935	3.603	1.437	40.494	2.147	0.008	-5.513	0.725				45.836	
4K.2	Income treated as negative expenditure	£m	3	-0.009	-0.011	-0.004	-0.140	-0.001	0.000	-8.601	0.000				-8.766	
4K.3	Discharge Consents	£m	3	0.852	1.059	0.422	4.585	0.000	0.000	0.300	0.000				7.218	
4K.4	Bulk discharge	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
	Other operating expenditure															
4K.5	- Renewals expensed in year (Infrastructure)	£m	3	20.499	28.554	11.384	0.000	0.000	0.843	0.000	0.000				61.279	
4K.6	- Renewals expensed in year (Non-Infrastructure)	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.7	- Other operating expenditure excluding renewals	£m	3	18.236	15.024	6.067	74.226	0.628	6.596	28.686	6.456				155.918	
4K.8	Local authority and Cumulo rates	£m	3	0.027	0.025	0.010	22.937	0.232	0.069	6.232	0.774				30.307	
4K.9	Total operating expenditure (excluding third party services)	£m	3	42.540	48.255	19.315	142.102	3.005	7.516	21.104	7.955				291.793	
4K.10	Third party services	£m	3	0.070	0.064	0.026	0.067	0.000	0.000	0.036	0.000				0.262	
4K.11	Total operating expenditure	£m	3	42.610	48.319	19.341	142.169	3.005	7.516	21.139	7.955				292.055	
B	Capital expenditure (excl. atypicals)															
4K.12	Maintaining the long term capability of the assets - infra	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.13	Maintaining the long term capability of the assets - non-infra	£m	3	41.169	0.000	0.000	148.777	0.000	0.000	18.826	3.638				212.411	
4K.14	Other capital expenditure - infra	£m	3	112.384	4.214	0.000	0.000	0.000	-0.671	0.000	0.000				115.928	
4K.15	Other capital expenditure - non-infra	£m	3	9.412	1.365	0.000	71.747	0.000	0.000	1.821	0.000				84.345	
4K.16	Infrastructure network reinforcement	£m	3	2.575	0.000	0.000	0.000	0.000	0.000	0.000	0.000				2.575	
4K.17	Total gross capital expenditure excluding third party services	£m	3	165.540	5.579	0.000	220.524	0.000	-0.671	20.647	3.638				415.257	
4K.18	Third party services	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.19	Total gross capital expenditure	£m	3	165.540	5.579	0.000	220.524	0.000	-0.671	20.647	3.638				415.257	
4K.20	Grants and contributions	£m	3	5.631	6.921	2.759	0.239	0.000	0.000	0.000	0.000				15.550	
4K.21	Totex	£m	3	202.519	46.977	16.582	362.455	3.005	6.846	41.786	11.593				691.762	
C	Cash expenditure (excl. atypicals)															
4K.22	Pension deficit recovery payments	£m	3	1.700	1.557	0.621	7.531	0.000	0.752	2.531	0.471				15.162	
4K.23	Other cash items	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.24	Totex including cash items	£m	3	204.219	48.534	17.202	369.985	3.005	7.598	44.318	12.064				706.924	
D	Atypical expenditure															
4K.25	Storm Impact (opex excluding IRE)	£m	3	-0.059	-0.057	-0.023	-0.350	0.000	-0.014	-0.095	-0.014				-0.612	
4K.26	Storm Impact (IRE)	£m	3	2.458	0.000	0.000	0.000	0.000	0.000	0.000	0.000				2.458	
4K.27	Storm Damage (capex)	£m	3	0.319	0.000	0.000	2.489	0.000	0.000	0.000	0.000				2.808	
4K.28	Item 4	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.29	Item 5	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.30	Item 6	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.31	Item 7	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.32	Item 8	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.33	Item 9	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.34	Item 10	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				0.000	
4K.35	Total atypical expenditure	£m	3	2.718	-0.057	-0.023	2.138	0.000	-0.014	-0.095	-0.014				4.654	
E	Total expenditure															
4K.36	Total expenditure	£m	3	206.937	48.477	17.180	372.124	3.005	7.583	44.223	12.050				711.578	

Key to cells:

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 Calculated value

For line definitions see Excel version of the data tables

2.6) Financial flows

Ofwat's vision for the water sector in England and Wales is one where customers, the environment and wider society have trust and confidence in vital public water and wastewater services.

In Ofwat's review of companies PR14 submission and their development of their published central case RORE value for each water company, they based their assessment on a theoretical, efficient company with a notional capital structure and a notional cost of debt.

To improve the transparency concerning financial flows to investors Ofwat require companies to complete and submit data for the three years of the APM6 period and publish the data for the current year in their APR.

We support the objective of increasing financial transparency and have published the information for all three years together with an average for the AMP to date in the tables set out below and have provided a clear comparison between the financial flows to investors on the basis of the actual capital structures of water companies and what they would have been under our notional structure.

Average for AMP6 to date*

(Price Base - 2012-13 RPI Average)

Line description	Units	DPs	%			£m			
			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity	
A									
1	Return on regulatory equity	%	2	5.56%	5.54%	5.56%	200.2	199.5	199.5
1a	Actual performance adjustment 2010-2015	%	2	0.76%	0.76%	0.76%	27.4	27.3	27.3
1b	Adjusted Return on regulatory equity	%	2	6.32%	6.30%	6.32%	227.6	226.8	226.8
2	Regulatory equity base	£	0	3,599	3,599	3,585			
B Financing									
3	Gearing	%	2	0.00%	0.01%	0.01%	0.0	0.4	0.4
4	Variance in corporation tax	%	2	0.00%	0.47%	0.47%	0.0	16.8	16.8
5	Group relief	%	2	0.00%	0.00%	0.00%	0.0	0.0	0.0
6	Cost of debt	%	2	0.00%	1.92%	1.94%	0.0	69.1	69.7
7	Hedging instruments	%	2	0.00%	-0.39%	-0.40%	0.0	-14.2	-14.2
8	Sub total	%	2	6.32%	8.31%	8.35%	227.6	298.9	299.5
C Operational Performance									
9	Totex out / (under) performance	%	2	0.00%	-0.20%	-0.20%	0.0	-7.3	-7.3
10	ODI out / (under) performance	%	2	0.00%	0.02%	0.02%	0.0	0.7	0.7
11	Retail out / (under) performance	%	2	0.00%	-0.03%	-0.03%	0.0	-1.1	-1.1
12	Sub Total	%	2	0.00%	-0.21%	-0.21%	0.0	-7.7	-7.7
13	Total earnings	%	2	6.32%	8.09%	8.14%	227.6	291.2	291.8
14	RCV growth	%	2	2.32%	2.32%	2.32%	83.3	83.3	83.0
15	Total shareholder return	%	2	8.64%	10.41%	10.45%	311.0	374.5	374.8
16	Net dividend	%	2	4.00%	6.23%	6.25%	144.0	223.4	223.4
17	Retained Value	%	2	4.64%	4.18%	4.20%	167.0	151.2	151.4
D Dividends reconciliation									
18	Gross Dividend	%	2	4.00%	6.22%	6.24%	144.0	223.7	223.7
19	Interest Receivable on Intercompany loans	%	2	0.00%	0.01%	0.01%	0.0	0.3	0.3
20	Net dividend	%	2	4.00%	6.23%	6.25%	144.0	223.4	223.4

 Calculated Average values from Input Sheets
 Calculated cell using the data in the 'RPI Indices' tab
 Linked or self calculating cells
 Totals

*Note that the £ million figures above represent a simple average of the annual returns for the three years.

For the 12 months ended 31 March 2016
(Price Base - 2012-13 RPI Average)

(Price Base - 2012-13 RPI Average)

Line description	Units	DPs	%		
			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
A					
1 Return on regulatory equity	%	2	5.63%	5.76%	5.63%
1a Actual performance adjustment 2010-2015	%	2	0.83%	0.85%	0.83%
1b Adjusted Return on regulatory equity	%	2	6.46%	6.61%	6.46%
2 Regulatory equity base	£	0	3,587	3,587	3,670
B Financing					
3 Gearing	%	2	0.00%	-0.07%	-0.07%
4 Variance in corporation tax	%	2	0.00%	0.14%	0.14%
5 Group relief	%	2	0.00%	0.00%	0.00%
6 Cost of debt	%	2	0.00%	0.75%	0.73%
7 Hedging instruments	%	2	0.00%	-0.37%	-0.36%
8 Sub total	%	2	6.46%	7.06%	6.90%
C Operational Performance					
9 Totex out / (under) performance	%	2	0.00%	0.00%	0.00%
10 ODI out / (under) performance	%	2	0.00%	0.07%	0.07%
11 Retail out / (under) performance	%	2	0.00%	-0.02%	-0.02%
12 Sub Total	%	2	0.00%	0.05%	0.05%
13 Total earnings	%	2	6.46%	7.11%	6.94%
14 RCV growth	%	2	1.05%	1.05%	1.05%
15 Total shareholder return	%	2	7.51%	8.16%	7.99%
16 Net dividend	%	2	4.00%	4.73%	4.63%
17 Retained Value	%	2	3.51%	3.43%	3.37%
D Dividends reconciliation					
18 Gross Dividend	%	2	4.00%	4.74%	4.64%
19 Interest Receivable on Intercompany loans	%	2	0.00%	0.01%	0.01%
20 Net dividend	%	2	4.00%	4.73%	4.63%

Input Cell
Calculated cell using the data in the 'RPI Indices' tab
Linked or self calculating cells
Totals

£m		
Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
202.0	206.6	206.6
29.8	30.5	30.5
231.8	237.2	237.2
0.0	-2.5	-2.5
0.0	5.0	5.0
0.0	0.0	0.0
0.0	26.9	26.7
0.0	-13.3	-13.3
231.8	253.3	253.1
0.0	0.0	0.0
0.0	2.5	2.5
0.0	-0.8	-0.8
0.0	1.7	1.7
231.8	254.9	254.7
37.7	37.7	38.6
143.5	292.7	293.3
143.5	169.8	169.8
0.0	122.9	123.6
143.5	170.1	170.1
0.0	0.4	0.4
143.5	169.8	169.8

For the 12 months ended 31 March 2017
(Price Base - 2012-13 RPI Average)

Line description	Units	DPs	%		
			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
A					
1 Return on regulatory equity	%	2	5.54%	5.53%	5.54%
1a Actual performance adjustment 2010-2015	%	2	0.73%	0.73%	0.73%
1b Adjusted Return on regulatory equity	%	2	6.28%	6.26%	6.28%
2 Regulatory equity base	£	0	3,594	3,594	3,584

£m		
Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
199.2	198.6	198.6
26.4	26.3	26.3
225.6	224.9	224.9

B Financing					
3 Gearing	%	2	0.00%	0.01%	0.01%
4 Variance in corporation tax	%	2	0.00%	0.35%	0.35%
5 Group relief	%	2	0.00%	0.00%	0.00%
6 Cost of debt	%	2	0.00%	1.75%	1.75%
7 Hedging instruments	%	2	0.00%	-0.34%	-0.34%
8 Sub total	%	2	6.28%	8.02%	8.05%

0.0	0.3	0.3
0.0	12.4	12.4
0.0	0.0	0.0
0.0	62.8	62.9
0.0	-12.1	-12.1
225.6	288.4	288.4

C Operational Performance					
9 Totex out / (under) performance	%	2	0.00%	0.00%	0.00%
10 ODI out / (under) performance	%	2	0.00%	0.19%	0.19%
11 Retail out / (under) performance	%	2	0.00%	-0.10%	-0.10%
12 Sub Total	%	2	0.00%	0.08%	0.09%

0.0	0.0	0.0
0.0	6.7	6.7
0.0	-3.6	-3.6
0.0	3.0	3.0

13 Total earnings	%	2	6.28%	8.11%	8.13%
14 RCV growth	%	2	2.16%	2.16%	2.16%
15 Total shareholder return	%	2	8.43%	10.27%	10.29%
16 Net dividend	%	2	4.00%	6.23%	6.24%
17 Retained Value	%	2	4.43%	4.04%	4.05%

225.6	291.4	291.5
77.6	77.6	77.4
143.8	369.0	368.9
143.8	223.8	223.8
0.0	145.2	145.1

D Dividends reconciliation					
18 Gross Dividend	%	2	4.00%	6.23%	6.25%
19 Interest Receivable on Intercompany loans	%	2	0.00%	0.01%	0.01%
20 Net dividend	%	2	4.00%	6.23%	6.24%

143.8	224.1	224.1
0.0	0.3	0.3
143.8	223.8	223.8

 Input Cell
 Calculated cell using the data in the 'RPI Indices' tab
 Linked or self calculating cells
 Totals

For the 12 months ended 31 March 2018

(Price Base - 2012-13 RPI Average)

(Price Base - 2012-13 RPI Average)

Line description	Units	DPs	%		
			Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
A					
1 Return on regulatory equity	%	2	5.52%	5.34%	5.52%
1a Actual performance adjustment 2010-2015	%	2	0.72%	0.70%	0.72%
1b Adjusted Return on regulatory equity	%	2	6.24%	6.04%	6.24%
2 Regulatory equity base	£	0	3,615	3,615	3,501
B Financing					
3 Gearing	%	2	0.00%	0.09%	0.10%
4 Variance in corporation tax	%	2	0.00%	0.91%	0.94%
5 Group relief	%	2	0.00%	0.00%	0.00%
6 Cost of debt	%	2	0.00%	3.25%	3.41%
7 Hedging instruments	%	2	0.00%	-0.48%	-0.49%
8 Sub total	%	2	6.24%	9.82%	10.20%
C Operational Performance					
9 Totex out / (under) performance	%	2	0.00%	-0.61%	-0.63%
10 ODI out / (under) performance	%	2	0.00%	-0.19%	-0.20%
11 Retail out / (under) performance	%	2	0.00%	0.03%	0.03%
12 Sub Total	%	2	0.00%	-0.77%	-0.79%
13 Total earnings	%	2	6.24%	9.05%	9.40%
14 RCV growth	%	2	3.74%	3.74%	3.74%
15 Total shareholder return	%	2	9.97%	12.79%	13.14%
16 Net dividend	%	2	4.00%	7.65%	7.90%
17 Retained Value	%	2	5.97%	5.14%	5.24%
D Dividends reconciliation					
18 Gross Dividend	%	2	4.00%	7.66%	7.91%
19 Interest Receivable on Intercompany loans	%	2	0.00%	0.01%	0.01%
20 Net dividend	%	2	4.00%	7.65%	7.90%

£m		
Notional returns and notional regulatory equity	Actual returns and notional regulatory equity	Actual returns and actual regulatory equity
199.5	193.2	193.2
26.0	25.2	25.2
225.5	218.4	218.4
0.0	3.3	3.3
0.0	32.9	32.9
0.0	0.0	0.0
0.0	117.7	119.6
0.0	-17.2	-17.2
225.5	355.1	357.0
0.0	-22.0	-22.0
0.0	-7.0	-7.0
0.0	1.1	1.1
0.0	-27.8	-27.8
225.5	327.3	329.2
135.1	135.1	130.8
360.5	462.4	460.0
144.6	276.6	276.6
215.9	185.8	183.4
144.6	276.9	276.9
0.0	0.3	0.3
144.6	276.6	276.6

 Input Cell
 Calculated cell using the data in the 'RPI Indices' tab
 Linked or self calculating cells
 Totals



Appendix 1 - Assurance summary and findings

This appendix is designed to demonstrate that we have complied with our published assurance plan, which was developed in accordance with the requirements of Ofwat's company monitoring framework. It also sets out the key findings from this assurance process and our specific targeted risk areas.

A) Overview and assurance framework

Company monitoring framework

In June 2015, Ofwat published its company monitoring framework for the 2015-20 (AMP6) period. This described how Ofwat oversee the information provided to customers by the 18 largest water and sewerage and water only companies in England and Wales. The framework supports Ofwat's vision for the water sector in England and Wales where customers and wider society have trust and confidence in vital public water and wastewater services.

The purpose of the framework is to ensure that stakeholders can rely on the information provided by water companies and to make sure that the assurance of this information is provided in a way that can help to build trust and confidence. There are two distinct elements to the framework;

- a) the data assurance activities that companies put in place to provide accurate data and
- b) the wider assurance that companies provide to demonstrate that they are listening to customers and delivering services they want and can afford.

As part of Ofwat's approach to monitoring and assuring delivery it expects companies to have processes in place to ensure that this information can be trusted and uses a series of tests of the quality of each company's information – to provoke and challenge the 17 largest companies to publish information that can be trusted.

As part of this annual review Ofwat rates each company depending on the quality of their information. The rating companies get decides the nature of the assurance that Ofwat expect from them in the future. The higher the rating, the more freedom that companies get over the assurance that they provide. The lower the rating, the less freedom they get.

In Ofwat's 2016/17 assessment published in November 2017, UuW maintained, the highest rating of "self-assurance". UuW exceeded expectations in three areas ("Outcomes", "Assurance plan" and "Data assurance summary") and met expectations in seven other areas.

This categorisation allows UuW more discretion in the assurance that we put in place and means that we are not required to consult with stakeholders to target issues to address and publish plans for our assurance. We do, however, continue to believe that it is important to be transparent in our assurance. Accordingly, during 2017/18 we published and consulted on a "Risks, strengths and weaknesses and draft assurance report" and then following feedback published our "Final Assurance Plan" for our 2017/18 reporting. These publications are available on [our website](#).

Assurance framework:

The document [AMP6 regulatory reporting assurance framework](#) is published on our website. It sets out the assurance activities that we have put in place to provide reliable, accurate and complete data. It also sets out the wider assurance activities that we undertake to ensure that we can effectively listen to our customers and other stakeholders' views and continue to deliver the services that they want and can afford. The framework is set out in six sections, which are summarised below

- **Measurement and data capture** - The data required to report on the delivery of our outcomes and other commitments has been developed to be a subset of our routine (and often long standing) operational and management information that is directly used to support and direct key business activities. We have also established a centralised reporting function, which has accountability for both assuring the quality of the data and for providing a single source of management information which can be used throughout the business.
- **Risk based assurance** - We have adopted a structured risk assessment process to underpin the governance and assurance processes supporting our regulatory reporting. The overall combined risk rating is used to help to determine the level of governance and assurance that is applied to the reported information.
 - As the level of risk increases the governance and assurance applied to the reporting of this data also increases and makes sure that key risks are escalated up to Board level where necessary to ensure that the management, control and reporting of any risks and resulting actions identified through the process are proportionate to the level of risk.
- **Targeted audit and assurance** - We have adopted a well-established “three lines of assurance” framework. The three lines of assurance are;
 - First line - Management has accountability for developing and maintaining sound processes, systems and controls in the normal course of their operations
 - Second line - The Economic regulation and strategy or Finance teams, where applicable, have accountability for providing the framework and governance for our regulatory reporting. Our Corporate Audit team undertake rolling and cyclical audit activity and targeted reviews of key submissions
 - Third line - Independent audit and assurance activities are undertaken by specialist external auditors.
- **Governance and accountability** - We are committed to the very highest standards of corporate governance with defined accountabilities from the UUK Board level through operational governance and review process.
- **Additional communications and publications** - In addition to publishing the minimum information requirements set out by Ofwat within the APR. We are committed to providing regular and transparent reporting of our performance and using a broad range of communications channels to communicate with our customers.
- **Independent challenge and review** - To ensure that our reporting is independently challenged we have established an independent stakeholder forum called the YourVoice panel. The role of the YourVoice panel is to both monitor and challenge us on the delivery of our business plan, to review and advise on our reporting and to scrutinise our customer engagement on the development of our future business plans.

B) 2017/18 Annual Performance Report assurance plan

Our 2017/18 Final assurance plan sets out how all data reported in the 2017/18 APR will be subject to a structured and risk based governance and assurance process, which is summarised in the table below. It also identifies a number of potentially higher risk (targeted) areas which are summarised on the next page.

Risk based assurance plan for the 2017/18 Annual Performance Report

Section	Content	Governance and assurance activities
Risk and Compliance statement	Annual statement confirming compliance with the relevant statutory, licence and regulatory obligations for the provision of services to its customers	Signed off by the UUW Board, based upon the defined governance and assurance approach relevant for each obligation.
Regulatory financial reporting	Historical cost financial information. Disaggregation of income, from a regulatory accounting perspective, with reconciliation to the UU statutory accounts.	<ol style="list-style-type: none"> 1. Data providers, their managers and business unit directors produce and approve data, commentaries and methodologies and audit trails to support the reported performance and demonstrate the control checks that have been applied. 2. Finance team review of information and audit trails. 3. Financial Auditors (KPMG) audit as set out in the audit opinion on pages 124 to 127.
Price review and other segmental reporting	Further separation of revenue and costs to allow stakeholders to review companies' performance against the FD.	<ol style="list-style-type: none"> 1. Data providers, their managers and business unit directors produce and approve data, commentaries and methodologies and audit trails to support the reported performance and demonstrate the control checks that have been applied. 2. Finance team review of information and audit trails. 3. Financial Auditors (KPMG) audit as set out in the audit opinion on pages 124 to 127.
Performance summary	A high-level report of the operational performance of the business against the performance commitments set out in the PR14 FD, highlighting any financial incentives accrued in the year.	<ol style="list-style-type: none"> 1. Data providers, their managers and business unit directors produce and approve data, commentaries and methodologies and audit trails to support the reported performance and demonstrate the control checks that have been applied. 2. Economic regulation and strategy team review of information and audit trails. 3. Technical Auditors (HMS) review data and commentary and report opinion to the Board.
Additional regulatory tables	Additional financial and non-financial information, including wholesale totex performance against both the PR14 FD assumptions and intercompany unit cost metrics, retail operating cost analysis and financial metrics.	<ol style="list-style-type: none"> 1. Data providers, their managers and business unit directors produce and approve data, commentaries and methodologies and audit trails to support the reported performance and demonstrate the control checks that have been applied. 2. Economic regulation and strategy team review of information and audit trails. 3. Financial Auditors (KPMG) or Technical Auditors (HMS) procedures as agreed with management on the relevant tables in Section 2.

Targeted areas, mitigation and assurance

In addition to the generic assurance processes described above and which have been applied to all of the data within the APR, we also reviewed the potential risks to our reporting as part of the development of the assurance plan.

This risk assessment process confirmed that our established systems of governance and control were effective in identifying and managing reporting risk levels. The areas we identified for additional assurance activity in our final assurance plan were flagged as a result of four main factors

- previous reporting issues had been identified,
- inherent data quality issues (usually due to new requirements or changes in circumstances or reporting regimes)
- high priority areas from a customer or stakeholder view point; and
- areas where delivery of our performance commitment targets may have been at risk.

The targeted areas identified in the final assurance plan are set out in the table below and described in detail in our published Final assurance plan.

Final assurance plan – targeted areas

Targeted area	Draft and / or final plan	Previous reporting issues	Inherent date accuracy	High priority areas	Delivery and performance
Outcome delivery incentives (ODIs)	Continued	✓	✓	✓	✓
Water quality	Continued			✓	✓
Water supply availability	Added for 2017/18			✓	✓
Service incentive mechanism	Continued			✓	
Price controls and segmental reporting	Continued	✓	✓		
Charges and tariffs schemes	Continued		✓		✓
Household retail customer experience programme	Continued		✓	✓	✓
PR19 business plan	Added for 2017/18		✓	✓	
PR19 – PR14 reconciliation	Added for 2017/18		✓	✓	
PR19 preliminary submissions	Added for 2017/18		✓	✓	
Water Resource Management Plan (WRMP)	Added for 2017/18		✓	✓	
New competitive markets - data platforms	Added for 2017/18				

Our 2017/18 [Final assurance plan](#) contains full details of the reason for the targeted status, the ongoing and planned activity to mitigate the risks and the planned activity to assure our reporting in these areas. The reason for the status of these targeted areas is set out in the table below. Corporate audit report and findings, set out in Section C of this Appendix, confirm that the assurance activities included within the Final Assurance Plan have been complied with and set out the summary of their findings.

2017/18 targeted areas and reason for status

Targeted area	Reason for targeted status
Outcome delivery incentives	Performance against our AMP6 performance commitments and outcome delivery incentives (ODIs) is a high priority area for customers and other stakeholders. Many of the measures have financial incentives, which will impact upon bills in the 2020-25 period. Many of the ODIs are also complex indexes and rely on large volumes of data recorded and analysed through complex systems and processes.
Water Quality Service Index	Water quality performance is an area of particular importance to customers and stakeholders. In October 2017 the Drinking Water Inspectorate published its findings and recommendations following the Lancashire water quality incident in summer 2015. Although the incident did not occur in the current regulatory year we continue to work closely with the DWI and delivery of our water transformation programme is ongoing. The WQSI is also an area where we have performance commitments that we were unlikely to be able to meet in 2017/18.
Service Incentive Mechanism	We have been reporting our performance against the SIM measure for a number of years and as such this was not identified as high risk as a consequence of internal reporting risks. SIM does, however, remain a high priority area for customers as it is a direct measure of customer service.
Price Control and Segmental Reporting	The APR requires detailed reporting of our revenues and expenditure against each price control and against separate accounting units within the wholesale price controls. The 2017/18 APR contains a number of revised data tables and some revised line definitions, with additional information being requested by Ofwat to support the PR19 cost assessment process.
Charges and Tariffs Scheme	Although we have been developing, assuring and publishing an annual charges scheme for a number of years, during 2017/18 elements of the charges scheme needed to be uploaded to CMOS, the business retail market operators central system, to allow these charges to be used in the competitive business retail market.
Household retail customer experience programme	The UUW Household Retail team is continuing its implementation of a comprehensive Customer Experience Programme, designed to provide improved customer service at a lower cost to serve. The delivery of this programme is subject to a specific performance commitment to ensure that if the programme can be delivered at a lower cost than assumed in the last price review then these savings are passed back to customers. Such programmes inevitably increase the inherent risks to our operational performance levels and reporting.

2017/18 targeted areas and reason for status (continued)

Targeted area	Reason
PR19 – business plan submission	The five yearly price review process determines the level of revenue that water companies can recover from customer bills for an assumed set level of performance, expenditure and financing. It is therefore, a complex and substantial exercise that has major significance for companies and customers. The main business plan submission for the 2020-2025 period is to be submitted to Ofwat by 3rd September 2018. This submission will be supported by additional supporting evidence.
PR19 – PR14 reconciliation	As part of the PR19 process, water companies need to set out the anticipated impact of their performance during the AMP6 period (2015-20) against the AMP6 targets and incentive regimes, which were set as part of the PR14 process. Ofwat requires companies to submit their projected five year, performance, expenditure and revenue collection levels and resultant incentive impacts in July 2018 alongside the Annual Performance Report (APR) and in advance of the main PR19 business plan submission. The mechanisms involved in this reconciliation include totex menus, Outcome Delivery incentives (ODIs), the Service Incentive Mechanism (SIM), wholesale revenue forecast incentives (WRFIM) and water trading incentives. The performance and incentives reported through these mechanisms will directly impact upon customer bills in the AMP7 (2020-25) period as a consequence of changes to either the starting regulatory capital value (RCV) of the company or changes to allowed revenues.
PR19 – Preliminary submissions	To support the development of markets in Water Resources and Bioresources services the PR19 process is disaggregating the two PR14 wholesale price controls (water and wastewater) into four new price controls. Separate controls are being established for each of Water Resources and Bioresources and two “network plus” price controls established to cover the remainder of the wholesale water and wastewater services. To support the development of these new price controls Ofwat requires companies to submit early proposals for how the existing RCV should be split between the four controls and to demonstrate the impact of these proposals on bills in each area. The results of these submissions will then be used to provide guidance on how these areas will be dealt with in the business plan submission in September 2018. Ofwat also requires early submissions from companies on their proposed outcome delivery incentives and special cost factors that will be used within the PR19 business plan. These submissions also allow Ofwat to provide feedback to companies prior to the PR19 business plan submission.
Water resource management plan (WRMP)	The water resource management plan (WRMP), considers how the supply and demand for water in the region is expected to change over the long term (80 years) and based upon this, identifies potential risks to the resilience of water supply to customers. It then reviews the range of potential options for managing these risks and sets out a preferred long term strategy, ensuring that water supplies remain reliable. In line with statutory requirements UUW (and all other water companies) published its draft WRMP in December 2017 for consultation prior to publishing a final WRMP in Summer 2018. This exercise has inherent data accuracy risks due to the complexity and scale of the exercise and is a high priority area for customers due to the direct impact the preferred approach has on customers and other stakeholders both in the region and nationally.
New competitive market data platforms	To support the development of markets in Water Resources and Bioresources services Ofwat required companies to publish and provide them with information on their existing assets and operations in Water Resources and Bioresources. Water Resources information was published in early 2018 alongside our draft WRMP and 2017/18 Bioresources and Market information is due to be published in July 2018. The risks to the accuracy of this information is relatively low, as the majority of the information will be available from existing assured sources, although there are some areas of additional disaggregation of information that will be required. However, the accuracy and transparency of this information is important in ensuring that markets in these two areas function effectively for the benefit of customers.

C) Summary of the findings of the assurance

This section of Appendix 1 sets out the summary of the findings of the assurance that has been undertaken to support the Annual Performance Report.

Financial auditor – We have employed KPMG to provide an audit opinion or perform procedures as agreed with management on the regulatory accounting information set out in the table below. The coverage of the KPMG audit opinion is set out in more detail, together with the findings from this review on pages 124 to 127 within Section 2.2 of the APR. KPMG have also completed agreed upon procedures for the Section 4 pro forma tables identified in the table below, with no issues noted.

Technical Auditors – We have employed Halcrow Management Sciences Limited (HMS), who are part of Jacobs, to review the performance and volumetric data used to support the remainder of the data within the APR tables, including the outcome delivery information. HMS have also been employed to review the supplementary Cost Assessment data that Ofwat have required companies to submit in addition to the APR, to help inform their future markets and price setting work ('Water 2020').

The findings from the technical auditor's review, which covers the APR information and the Cost Assessment information, were presented to the U UW Board and are set out in on pages 197 to 203, below. The Independent Technical Assurance Statement is set out on Page 203.

Corporate audit – UU Corporate Audit have undertaken an independent review of the effectiveness and application of the assurance framework applied to the APR. Their findings were presented directly to the U UW Board and are set out in on pages 204 to 208 below.

In addition **YourVoice**, the independent stakeholder forum, have reviewed our performance and reporting throughout the year and presented their findings directly to the U UW board. They have also published their reflections on United Utilities' performance during 2017-18, which can be found [here](#).

The table below sets out each data table of the APR and shows how the independent assurance has been provided for that area.

U UW Annual Performance Report data tables – independent assurance

Data – Tables			
Section 1 Regulatory financial reporting		Lines	Independent assurance
1A	Income statement	All	KPMG audit opinion
1B	Statement of comprehensive income	All	KPMG audit opinion
1C	Statement of financial position	All	KPMG audit opinion
1D	Statement of cash flows	All	KPMG audit opinion
1E	Net debt analysis at 31 March 2018	All	KPMG audit opinion
Section 2 Price review and other segmental reporting			
2A	Segmental income statement	All	KPMG audit opinion
2B	Totex analysis - wholesale water and wastewater	All	KPMG audit opinion
2C	Operating cost analysis – retail	All	KPMG audit opinion
2D	Historical cost analysis of tangible fixed assets wholesale and retail	All	KPMG audit opinion
2E	Analysis of 'grants and contributions' and land sales – wholesale	All	KPMG audit opinion
2F	Household – revenues by customer type	All	KPMG audit opinion
2G	Non-household water – revenues by customer type	All	KPMG audit opinion
2H	Non-household wastewater – revenues by customer type	All	KPMG audit opinion
2I	Revenue analysis & wholesale control reconciliation	All	KPMG audit opinion

Section 3 Performance summary			
3A	Outcome performance table	All	HMS agreed upon procedures
3B	Sub measure performance table	All	HMS agreed upon procedures
3C	AIM table	All	HMS agreed upon procedures
3D	SIM table	All	HMS agreed upon procedures
3S	Shadow reporting of new definition data		HMS agreed upon procedures
Section 4 Additional regulatory information			
4A	Non-financial information	All	HMS agreed upon procedures
4B	Wholesale totex analysis	All	KPMG agreed upon procedures
4C	Impact of AMP performance to date on RCV	All	KPMG agreed upon procedures
4D	Totex analysis – wholesale water	1-24	KPMG agreed upon procedures
4D	Totex analysis – wholesale water	25-28	HMS agreed upon procedures
4E	Totex analysis – wholesale wastewater	1-24	KPMG agreed upon procedures
4E	Totex analysis – wholesale wastewater	25-28	HMS agreed upon procedures
4F	Operating cost analysis – household retail	All	KPMG agreed upon procedures
4G	Wholesale current cost financial performance	All	KPMG agreed upon procedures
4H	Financial metrics	All	KPMG agreed upon procedures
4I	Financial derivatives	All	KPMG agreed upon procedures
4J	Atypical expenditure by business unit - Wholesale water	All	KPMG agreed upon procedures
4K	Atypical expenditure by business unit - Wholesale wastewater	All	KPMG agreed upon procedures
Section 4b Cost assessment data			
4L	Enhancement expenditure by purpose - Wholesale water	All	HMS agreed upon procedures
4M	Enhancement expenditure by purpose - Wholesale wastewater	All	HMS agreed upon procedures
4N	Operating expenditure - Sewage treatment - Wholesale wastewater	All	HMS agreed upon procedures
4O	Large sewage treatment works - Wholesale wastewater	All	HMS agreed upon procedures
4P	Non-financial data for WR, WT and WD - Wholesale water	All	HMS agreed upon procedures
4Q	Non-financial data - Properties, population and other - Wholesale water	All	HMS agreed upon procedures
4R	Non-financial data - Wastewater network and sludge - Wholesale wastewater	All	HMS agreed upon procedures
4S	Non-financial data - sewage treatment - Wholesale wastewater	All	HMS agreed upon procedures
4T	Non-financial data - sludge treatment - Wholesale wastewater	All	HMS agreed upon procedures
4U	Non-financial data - Properties, population and other	All	HMS agreed upon procedures
4V	Operating cost analysis - water resources	All	HMS agreed upon procedures
4W	Operating cost analysis - sludge treatment	All	HMS agreed upon procedures

Tables 3S and 4L to 4W and supporting commentaries are not included in the APR and are provided to Ofwat separately. Tables 4L to 4W and supporting commentaries can be found as standalone reports on our website.

Halcrow Management Sciences Limited technical assurance report to the Board of United Utilities Water Limited

1. Introduction

For AMP6, all water companies are required by Ofwat to submit an Annual Performance Report (APR) to demonstrate compliance with their separate price controls. This includes specific information on progress on delivery of customer outcomes, service levels, transparent cost information and financial performance. Data used by United Utilities (UW) to populate the APR has been predominantly derived from their RR18 data return.

The reports prepared by the Company are required to be accessible to all stakeholders so that they show how the sector is delivering for its customers, environment and wider society and in this regard, Ofwat has provided a series of standard templates and accompanying guidance for the outcome, performance commitment and incentive mechanisms. The information in the spreadsheet will assist stakeholders to track and compare actual performance.

For 2017/18, Ofwat also requires that the supplementary cost assessment data (provided separately for 2016/17) to be incorporated into the APR to help inform their future markets and price setting work ('Water 2020'). Where the required cost assessment data was not already captured within the RR18 data return, UW has added additional lines to ensure all data reported is subject to independent technical assurance.

Additionally, in order to help inform the setting of the outcome performance commitments from 2020 onwards, Ofwat developed consistent reporting guidance for three metrics (leakage, supply interruptions and sewer flooding) in 2016/17. Whilst companies are required to report these 'shadow' measures alongside the APR, UW has also incorporated these requirements into the RR18 data return.

Furthermore, some of the RR18 data lines have been further enhanced to also include forecasts for the remaining two years of AMP6, which have also been subject to independent technical assurance.

Each company's Board is accountable for the quality and transparency of the information they provide on their performance and for implementing assurance procedures to make sure they meet all of their legal and regulatory obligations.

Halcrow Management Sciences (HMS) has been engaged by UW to provide external technical assurance, that specific technical and expenditure elements of the RR18 have been compiled in accordance with the guidance¹ of, the Water Services Regulatory Authority (Ofwat), good practice and the PR14 Determination. The report below sets out our approach. Our key findings are summarised in Appendix 1 and 2.

HMS is currently a Jacobs Company but operates independently to ensure confidentiality and to avoid conflicts of interest.

¹Guidance includes:

Regulatory Accounting Guidelines versions 1.08; 2.07; 3.10; 4.07 APR table templates and guidance.

Performance commitments and definitions agreed with Ofwat for the AMP6 period, or as subsequently superseded Ofwat's most recent June Return guidance.

Cost Assessment and Shadow Reporting definitions and guidance.

UW procedures, definitions and assumptions which should where relevant, be compliant with the guidance hierarchy above.

2. Role and Scope

HMS has been engaged to provide an independent review of UUW's compliance and governance processes covering the key technical information presented in or supporting their regulatory performance and public domain information reports.

The scope of our work has been determined by UUW, and agreed in our Outline Assurance Plan, dated 26th March 2018, which is summarised as follows:

APR information (as reported in RR18), which is prepared in accordance with Ofwat's APR guidance and information which supported the Final Determination for the AMP6 period and includes:

- General information
- Customer service information
- Operational activities and performance
- Networks and treatment
- Capital expenditure allocations to revenue controls and business streams, to investment categories and to measures of success
- Calculation of 2017/18 rewards and penalties associated with the Outcome Delivery Incentive mechanisms
- Other miscellaneous metrics

Where the above guidance does not cover the items assured, they are assessed against the guidelines set out by Ofwat for June Return information up to 2012, where detailed Reporting Requirements can be used to assess compliance and consistency of reporting over time and between companies.

Performance Commitments/Measures of Success (included with the APR)

The requirements for this information were established at PR14 where the definitions were documented for the performance commitments, the AMP6 targets and operating thresholds were set and penalty/reward mechanisms were agreed for a number of these.

Many of the components involved in the Measures of Success are developed from the RR18 information above, and we checked to ensure each Measure of Success had been populated with the appropriate RR18 performance data. Our key findings relating to the MoS are summarised in Appendix 2.

Cost Assessment Submission (added to the APR for 2017/18)

This is an additional data requirement, that was initially requested by Ofwat in 2016/17 to assist in their cost assessment modelling to help inform their future markets and price setting work ('Water 2020'), but is now required as part of the Company's APR submission. Whilst some of this data was already captured by UUW within previous RR data returns, additional lines/tables have now been added to RR18 to enable population of the complete dataset.

Shadow Reporting /Convergence Measures (submitted alongside the APR)

Companies have worked together, and with Ofwat, to develop consistent reporting guidance for three metrics (leakage, supply interruptions and sewer flooding) to help inform the setting of the outcome performance commitments from 2020 onwards. Reporting against these requirements for 2017/18 has also been incorporated into RR18.

AMP6 Forecasts (used to support the PR14 reconciliation submission)

For data sets where the line owner is common to both, forecast data for the two remaining years of AMP6 have also been included in the RR18 assurance for use in the PR19 process.

3. Approach

3.1 Process

Our approach is summarised in the following steps:

1. Agree Scope with U UW
2. Produce and agree Assurance Plan
3. Review preliminary topic information
4. Undertake Face-to-Face Audits
 - Check that the Company's reported data conforms to the published guidance (generally JR11 Ofwat Reporting Requirements KPI, cost assessment or shadow reporting guidance).
 - Identify and examine the material assumptions to assess their reasonableness, and challenge those which we deem to be inappropriate.
 - Where appropriate, test on a sample basis, U UW's approach against its stated methods, procedures, policies and assumptions, and reliability of source data.
 - Review the appropriateness of the confidence grades assigned,
 - Assess performance in the Report Year and check consistency against that of previous years and,
 - Ensure relevant performance data has been accurately utilised in the calculation of the various Measures of Success, where applicable.
5. Summarise Audit Findings
6. Close out key issues – through iteration between auditor and U UW specialists, escalating through both organisations where appropriate to agree, as appropriate: adjustment to reported information; future action plans; or additional statements which provide adequately transparency of the issue.
7. Presentations and preparation of Reports and Assurance Statement.

3.2 Assessment

We use the following RAG coding to simply highlight the areas of concern

Figure 1

RAG Criteria used in HMS Assessments for RR18 (including additional Cost Assessment Data) and Measures of Success information

Key to Audit RAG status	
R	Material concerns over the validity of the submission
A	Minor concerns over reported data or concerns over supporting documentation
B	Content with reported information but supporting data needs completion/noting/future improvements required
G	No material exceptions and compliant with the requirements

The following tests are applied to the data presented and accompanying commentaries:

Figure 2

Example of Tests applied to RR18 and Measures of Success information

RR17 Table Criteria	RAG	Assessment
Independent Review of Performance and Reporting	Green	Performance good. Reporting process well managed
Methodology	Green	Methodology consistent with current process, control points identified and understood
Assumptions	Green	Assumptions reasonable and appropriately applied
Source Data	Green	Source data is clearly identified, complete beyond material concern, well managed through to accurate systems input
Clarity of Audit Trails	Green	Detailed and comprehensive audit trail to all numbers available
Confidence Grades	Green	Confidence grade appropriate and rationale clearly documented
Governance	Green	Responsibilities for integrity of data and commentary clearly defined. Good evidence of engagement and of final sign-off

MoS Criteria	RAG	Assessment
MoS Performance Data	Green	Performance figures are accurately carried forward to the Measure of Success and correctly calculated in accordance with Ofwat's final PR14 methodology

4. Findings

Below we highlight the exceptions and other key findings.

A Summary of the exceptions and recommended areas for improvement have been identified as shown in Appendix 1. Detailed reports of each RR18 and associated Measure of Success audit will be provided under separate cover.

4.1 RR18 (APR, Cost Assessment, Shadow Reporting, AMP6 Forecasts) and Measures of Success

- The reported data is materially compliant with Ofwat's Reporting Requirements (PR14 and/or June Return as appropriate), Cost Assessment and Shadow Reporting line definitions.
- The commentaries and statements provide a fair and balanced commentary of the Company's 2017/18 circumstances and performance.
- Procedures and assumptions are generally reasonable and well embedded, well documented and appropriately implemented.
- Whilst there are no Red status concerns, some data is still outstanding at the time this statement was prepared, relating to the water related shadow reporting measures, sludge and enhancement capex (which is submitted alongside the APR). However, we do not anticipate any issues, as processes have been previously reviewed with no concerns.
- There are a small number of Amber status concerns remaining (7), these primarily relate to areas where the granularity of the data available for non-household complaints has been reduced as a consequence of the opening of the non-household retail market or areas where the current guidance or industry practice is unclear and assumptions have needed to be made in the methodologies that have been utilised.
- Overall, UuW staff were knowledgeable, helpful, receptive and generally well prepared for the audits. However, there were a number of instances where data and supporting information was not available, meaning that scheduled audits were unable to be completed. Whilst this was often due to the need to further refine or amend methodologies in order to improve the quality of reported data, delays have significantly prolonged the audit programme.
- Notwithstanding the above, we continue to see very good evidence of senior management engagement.
- As highlighted above, whilst there are a few Amber status concerns, which we discuss in further detail below, the majority of the observations raised (Blue), are relatively minor and are mainly recommendations for UuW to review their processes and to watch the trends over the coming year, (see Appendix 1 and 2 for further details):

Summary of Current Issues RR17 (APR & Cost Assessment) & MoS	RAG Status			
	R	A	B	G
Performance & Reporting issues	0	1	8	85
Methodology amendments proposed	0	2	10	82
Assumption issues	0	0	5	89
Source Data shortcomings	0	2	14	79
Audit Trail not sufficient	0	0	11	83
Confidence Grades needed or change recommended	0	0	6	89
Governance not complete at time of audit	0	0	23*	71
MoS issues	0	2	4	22
Totals	0	7	81	600

- Once all data has been compiled and been through Level 2 or 3 signoff, we will complete a check of records to ensure the prescribed governance processes have been applied to all reported data, which should result in a change from Blue to Green status.

Amber Findings:

T5b – MoS R-A1 (SIM) – We highlighted an inconsistency in Ofwat’s new Table 3D which involves the number of decimal places that are used for the annual customer satisfaction score. Ofwat’s RAG 4.07 guidelines for APR 2017/18 states that the annual average customer satisfaction survey score must not be rounded before being used in the calculation of the qualitative SIM. It is not clear what is meant by ‘not rounded’ as this could be interpreted in several ways and each method produces slightly different SIM scores within the range +/- 0.05. UU’s method seems appropriate but it may be inconsistent with other companies’ interpretation of the guidelines and therefore could potentially affect SIM table position and UU’s achievement of the ‘upper quartile’ R-A1 performance commitment.

T5b - MoS R-A2 (Customer Experience Programme) – We found that UUW had correctly reported that the MoS R-A2 depreciation target will not be achieved in 2017/18 due to the change in expected commissioning of projects and a change of scope of systems delivered. The Company has made the decision to abort the CRM project and replace with certain elements in order to deliver the same outcomes to customers. This decision was made as part of the detailed design and optioneering of the programme. There is uncertainty over Ofwat’s interpretation of the ‘full delivery’ aspect of the ODI. To seek to address this uncertainty UU has developed a detailed proposal for how the ODI should be interpreted by Ofwat and has reviewed this proposal with Your Voice and ourselves. We concluded that the penalty proposed by UU was appropriate. This proposal will be submitted to Ofwat as part of the PR14 reconciliation submission.

T5 – DG7 Lines – Following the opening of the NHH retail market, UU now obtains information on Wholesale complaints affecting NHH customers from the relevant retailer via the CMOS system. This means that the non-household JIRA system in its current form, cannot distinguish whether a complaint is originated in writing or by telephone when the customer originally contacted the retailer, or whether the complaint is stage-1 or at an escalated stage, or if it is water or wastewater related. The Company have therefore counted all complaints via JIRA as stage-1 written complaints assigned to the water category, in RR18 Table T5. This table is not directly used to populate a table within the APR but is used to support the population of PR19 table APP31.

5. Independent Technical Assurance Statement

Halcrow Management Sciences has been appointed by United Utilities Water to provide independent technical assurance of the data that feeds into their regulatory submissions.

Through a series of meetings and information exchanges, we have reviewed and tested the methodologies, processes and supporting evidence on which the statements in the Annual Performance Report 2018 are based, and we have considered the material accuracy of these statements, the performance data presented and the conclusions drawn by United Utilities Water. Our detailed findings will be provided under separate cover.

On the basis of our audit work and with exceptions as noted in Appendix 1 and 2, we are satisfied that the information within and which supports the RR18 has been assembled using appropriate data and methodologies and provides a reliable representation of Company performance. There is also good evidence of senior management engagement, governance and programme management.



GA Hawken

Technical Assurance Director

Halcrow Management Sciences Limited

25 June 2018



Halcrow Management Sciences Limited
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United Kingdom

Corporate Audit review of regulatory reporting 2017/18

1. Executive Summary

1.1 Purpose

To report the results of the audit work carried out by Corporate Audit to support the approval of the 2017/18 Annual Performance report (APR) by the Uuw Board.

1.2 Context

Ofwat has set out its approach to monitoring and assuring the delivery of the AMP6 contract. The two key elements of this framework are:

- The Annual Performance Report (APR), which outlines Ofwat's minimum information requirements; and
- The Company Monitoring Framework, which sets out the review and assurance processes that support Uu's reporting.

The Annual Performance Report, together with a summary of the results of the data assurance ('Assurance Report'), needs to be published by 15 July each year. Our audit is therefore timed to provide assurance over the process by which regulatory data is compiled in advance of Uuw Board sign-off.

1.3. Audit Objective

The objective of the audit is to provide assurance in respect of the governance, processes and key controls over the production of the 2017/18 Annual Performance Report and associated Assurance Report. Refer to Section 2 for details of the scope of the audit.

1.4. Conclusion

Based on the work carried out, we are satisfied that data reported in sections 3 and 4 of the Annual Performance Report is supported by underlying systems, data and tables, and that it has been compiled in accordance with RAG 3.10 "Guideline for the format and disclosures for the annual performance report".

The overall governance arrangements in place and assurance activities to ensure the regulatory data is compiled accurately and completely have been followed sufficiently in accordance with the published Assurance Plan, and the proposed Assurance Report is a fair reflection of the associated assurance activities and results thereof.

We reviewed the overall APR document as it was being prepared for issues of presentation and consistency. We fed back our observations and suggestions to Economic regulation and strategy in real time such that they could be responded to and then confirmed that the required changes had been incorporated into the APR.

2. Background and scope of review

2.1. Background

The Annual Performance Report

Ofwat require companies to report on their financial and operational performance in an Annual Performance Report (APR). This includes information specific to customers and stakeholders, together with information that enables comparison between companies across the sector.

As part of the APR Ofwat require that a risk and compliance statement is published annually, setting out how the company has complied with all its relevant statutory, licence and regulatory obligations and is taking appropriate steps to manage and/or mitigate key risks it faces.

The APR is supplemented by a series of data tables and supporting commentary in four main Sections:

- Section 1: Regulatory financial reporting;
- Section 2: Price control and additional segmental reporting of costs and revenues;;
- Section 3: Performance summary (including outcome delivery performance); and
- Section 4: Additional regulatory information (including totex and financeability information).

The Company Monitoring Framework

This is designed to ensure that stakeholders can have confidence in the information that is provided by water companies and to make sure that the assurance of this information is provided in a proportionate way. The framework considers both the data assurance activities that companies put in place to provide accurate data and the wider assurance that they provide to demonstrate that they are listening to customers and delivering services they want and can afford. Ofwat assesses companies between three categories: self-assurance, targeted assurance and prescribed assurance. UUW is currently within the 'self-assurance' category.

UUW's approach to the framework

As part of the 2017/18 annual reporting cycle, UUW has published two documents:

- A statement of risks, strengths and weaknesses in regulatory reporting, together with a draft assurance plan (published [November 2017](#)). This is a consultation document, with Ofwat being one of those consulted; and
- The final assurance plan, setting out the assurance that will be adopted for the 2016/17 regulatory reporting. This was published in [March 2018](#) and reflects feedback obtained during the draft assurance plan and further internal analysis.

Governance arrangements will continue to follow the 'Three lines of assurance' model and are built upon the established processes in place for previous years' annual regulatory reporting. Important aspects of this activity are:

- All data is subject to data owner and senior manager (Level 3) sign-off and independent expert / peer review of supporting information and audit trails;
- Additional internal review and sign-off at more senior levels depending on the risk profile with 'critical' data items being taken to the Board for sign-off;
- All of the financial regulatory accounts information will be subject to an annual audit by the external auditors (KPMG); and
- All of the regulatory performance data (ODIs) will be subject to an annual review by the external technical auditors Halcrow Management Sciences.

2.2. Key Risks

The overall risk is that inaccurate, incomplete or misleading data / information is published and reported to Ofwat resulting in regulatory action being taken against UU and/or its individual Directors. Consequently, financial penalties could be imposed together with a loss of confidence by customers and investors and a “demotion” of Company Monitoring Framework category, potentially impacting UU’s PR19 categorisation.

2.3 Scope

The scope of this review supplements the assurance provided by KPMG and Halcrow Management Sciences, providing the Board with assurance over the 2017/18 regulatory reporting governance, processes and key controls in advance of the Board sign-off of the Annual Performance Report and Assurance Report prior to publication in July 2018.

The audit covered the following areas:

- The validity consistency of the data reported in Sections 3 and 4 of the Annual Performance Report. This included sample testing to agree data back to underlying UU records and systems. Note: this review will not duplicate the work undertaken by KPMG;
- Consistency of the commentary with the underlying data within the APR;
- Compliance of the reported data in the APR with key aspects of Regulatory Guideline 3.09 “Guideline for the format and disclosures for the annual performance report”;
- Overall governance arrangements in place to ensure the regulatory data is complete and accurate and reported in line with the required timescales;
- Confirmation that assurance activities detailed in UU’s published Final Assurance Plan have been completed in line with the plan; and
- Review the proposed Assurance Report (to be published along with the Annual Performance Report 2017/18) to ensure it is a fair reflection of the associated assurance activities and results thereof.

Exclusions from scope

- As testing was performed on a sample basis, the review did not verify all the regulatory data or compliance with regulatory obligations;
- Sections 1 and 2 of the Annual Performance Report which are subject to external audit by KPMG with opinion
- Review of the ODI data collection, incentive calculations and reporting processes as this was performed by the technical auditor Halcrow Management Sciences;
- The review did not assess the underlying adequacy of other assurance activities performed or the competency and objectivity of the assurance provider; and
- The regulatory performance of the business.

3. Summary of work carried out and findings

3.1. Consistency of the data reported in Sections 3 and 4 of the Supporting Tables to the Annual Performance Report

We selected a sample of 20 table data lines and these were traced back to the underlying systems and records with reference to the supporting Methodology Statements. We tested for consistency of the reported data within the commentary of the “annual performance report”.

No issues were noted.

3.2. Consistency of the commentary with the underlying data within the APR

Our review covered the consistency of the narrative explanations and the supporting data reported within the APR.

In addition, we have reviewed the APR document (version dated 21 June) for issues of presentation and consistency as the document was being prepared. We fed back our observations and suggestions to Economic regulation and strategy in real time such that they could be responded to, and then confirmed that the required changes had been appropriately incorporated into the APR. We will continue to review subsequent versions of the document and feedback our comments in real time until the document is finalised.

3.3. Compliance of the reported data in the APR with key aspects of Regulatory Accounting Guideline 3.09

We reviewed the content of the Annual Performance Report against the requirements set out in RAG 3.09 “Guideline for the format and disclosures for the annual performance report” for omissions or contradictions.

No issues were noted.

3.4. Overall governance arrangements in place to ensure the regulatory data is completed accurately, completely and to the required timescales

In respect of sample data from 3.1, we ensured that the management review of Performance and Compliance Statements and Methodology Statements had been evidenced in line with the Assurance Plan.

We were able to obtain evidence of the physical sign-offs in all but one case (sewer flooding). We have accepted assurances by email from the Level 3 signatory that the sign-off will be completed on 26 June 2018 and we will confirm that this has taken place prior to publication of the APR.

3.5. Confirmation that assurance activities detailed in UU’s published Final Assurance Plan have been completed in line with the plan

We verified, on a sample basis, that the assurance activities as described within the Assurance Plan had been performed. In particular, we reviewed the explanation of KPMG’s and Halcrow Management Sciences’ responsibilities within the Final Assurance Plan against the respective assurance reports.

No issues were noted

3.6. Review the proposed Assurance Report to ensure it is a fair reflection of the associated assurance activities and results thereof

We have reviewed the draft Assurance Report and are satisfied that it is a fair reflection of the assurance activities performed and the results of those activities.

4. Distribution

To:

Steve Mogford Chief Executive Officer

Cc:

Russ Houlden Chief Financial Officer

Steve Fraser Chief Operating Officer

James Bullock Strategy and Regulation Director

Phil Aspin Group Controller

Mark Abbott Regulatory Contract Manager

Appendix 2 – Outcome Delivery Incentive Calculations

Introduction

This appendix sets out how the reported performance levels and associated out performance payments and penalty calculations have been determined for our performance commitments that are based upon an index of sub measures. Information is provided for both the 2015/16 and 2016/17 calculations.

Our index based performance commitments are:

- A3 - Water Quality Service Index
- B2 - Reliable Water Service Index
- S-A1 - Private sewers index
- S-A2 Wastewater network performance index
- S-B2 Sewer flooding index
- S-D2 Maintaining our WwTW

A description of the performance of these index measures is provided in Section 1 of the APR.

The performance for each of the sub measures is also set out in Pro forma Table 3B, within Section 2.5 of the APR.

Performance commitment A3 - Water Quality Service Index

Derivation of top level index score

The overall index score for this measure is calculated by multiplying the actual performance by the weighting for each sub measure, summing the results and adding a constant (-15,628.2236).

2015/16 calculation

The derivation of the 2015/16 index score of 120.4653 is set out below. The actual performance is multiplied by the weighting for each of the sub measures.

Performance targets	Sub measure incentive contribution	Target Performance 2015/16	Actual Performance 2015/16	Weighting	Target	Actual Performance 2015/16 x weighting
WTW Coliform non-compliance (%)	Penalty only	0.04	0.06	-16.21712812	-0.6487	-0.9730
SR Integrity Index	Penalty only	99.96	99.98	37.39055984	3737.5604	3738.3082
No. of WTW turbidity fails	Penalty only	1	1	-0.076539797	-0.2296	-0.0765
Mean Zonal Compliance (%)	Penalty only	99.96	99.96	116.549188	11650.2568	11650.2568
Distribution Maintenance Index (%)	Penalty only	99.88	99.89	4.48246986	447.7091	447.7539
Sum of weighted target performance for penalty only sub measures					15834.6480	15835.2694
No. unwanted customer contacts for water quality (per year)	Penalty and reward	9,226	9,171	-0.009440671	-87.0996	-86.5804

Weighted sum	15748.6890
Constant	-15628.2236
Weighted sum plus constant (i.e. Index score)	120.4654

Derivation of the 2015/16 out performance payments or penalty

The calculation of the penalty and the out performance payments for this measure are determined on a different basis.

The size of any penalty associated with the WQSI is determined by the under performance of all six sub measures. The size of any out performance payment is however based upon the out performance of the customer contact sub measure only. For the out performance payments calculation the other five (water quality) sub measures do not contribute to the out performance payments as water quality compliance is a statutory obligation and it was not deemed to be appropriate to gain a out performance payments for meeting our statutory obligations.

Therefore the size of any WQSI out performance payments is based upon the actual customer contact value plus the lower of a) the sum of the weighted actual scores or b) the sum of the weighted target scores, for the five water quality compliance measures. The derivation of the index score used in the out performance payments calculation is set out below:

Sum of lower of target or actual performance for performance measures plus actual customer contact performance	15748.0676
Add constant	-15628.2236
Index score for reward calculation	119.8440

The out performance payment is therefore determined as = (Index score for out performance payments calculation – Reward deadband) x reward incentive rate

Out performance payment = (119.8439843-119.3) x 0.471 = £0.227 million

2016/17 calculation

The derivation of the 2016/17 index score of 116.923 is set out below. The actual performance is multiplied by the weighting for each of the sub measures.

Performance targets	Sub measure incentive contribution	Target Performance 2016/17	Actual Performance 2016/17	Weighting	Target Performance 2016/17 x weighting	Actual Performance 2016/17 x weighting
WTW Coliform non-compliance (%)	Penalty only	0.04	0.01	-16.21712812	-0.6487	-0.1622
SR Integrity Index	Penalty only	99.96	99.98	37.39055984	3737.5604	3738.3082
No. of WTW turbidity fails	Penalty only	3.00	2	-0.076539797	-0.2296	-0.1531
Mean Zonal Compliance (%)	Penalty only	99.96	99.96	116.549188	11650.2568	11650.2568
Distribution Maintenance Index (%)	Penalty only	99.88	99.85	4.48246986	447.7091	447.5746
Sum of weighted target performance for penalty only sub measures					15834.6480	15835.8244
No. unwanted customer contacts for water quality (per year)	Penalty and reward	8,065	9,605	-0.009440671	-76.1390	-90.6776

Weighted sum	15745.1467
Constant	-15628.2236
Weighted sum plus constant (i.e. Index score)	116.923

Derivation of the 2016/17 out performance payments or penalty

The calculation of the penalty and the reward for this measure are determined on a different basis.

The size of any penalty associated with the WQSI is determined by the under performance of all six sub measures. The size of any out performance payments is however based upon the out performance of the customer contact sub measure only. For the out performance payments calculation the other five (water quality) sub measures do not contribute to the out performance payments as water quality compliance is a statutory obligation and it was not deemed to be appropriate to gain a out performance payments for meeting our statutory obligations.

Therefore the size of any WQSI out performance payments is based upon the actual customer contact value plus the lower of a) the sum of the weighted actual scores or b) the sum of the weighted target scores, for the five water quality compliance measures. The derivation of the index score used in the out performance payments calculation is set out below:

Sum of lower of target or actual performance for performance measures plus actual customer contact performance	15834.6480
Add constant	-15628.2236
Index score for reward calculation	115.7467

As the index score is also below the penalty cap the capped penalty has been applied. The penalty is therefore determined as = (Penalty deadband – Penalty cap) x penalty incentive rate

Penalty = (130.3-125.6) x -0.77 = -£3.619million.

2017/18 calculation

The overall index score for this measure is calculated by multiplying the actual performance by the weighting for each sub measure, summing the results and adding a constant (134.147).

Performance targets	Sub measure incentive contribution	Target Performance 2017/18	Actual Performance 2017/18	Weighting	Target Performance 2017/18 x weighting	Actual Performance 2017/18 x weighting
WTW Coliform non-compliance (%)	Penalty only	0.04	0.01	-16.21712812	-0.6487	-0.1622
SR Integrity Index	Penalty only	99.96	99.97	37.39055984	3737.5604	3737.9343
No. of WTW turbidity fails	Penalty only	3	1	-0.076539797	-0.2296	-0.0765
Mean Zonal Compliance (%)	Penalty only	100.00	99.97	116.549188	11654.9188	11651.4223
Distribution Maintenance Index (%)	Penalty only	99.88	99.89	4.48246986	447.7091	447.7539
Sum of weighted target performance for penalty only sub measures		6,904	11,652		15839.3099	15836.8718
No. unwanted customer contacts for water quality (per year)	Penalty and reward	6,904	11,652	-0.009440671	-65.1784	-110.0027

Weighted sum	15726.8691
Constant	-15628.2236
Weighted sum plus constant (i.e. Index score)	98.6455

Derivation of the 2017/18 out performance payment or penalty

The calculation of the penalty and the reward for this measure are determined on a different basis.

The size of any penalty associated with the WQSI is determined by the under performance of all six sub measures. The size of any out performance payment is however based upon the out performance of the customer contact sub measure only. For the out performance payments calculation the other five (water quality) sub measures do not contribute to the out performance payment as water quality compliance is a statutory obligation and it was not deemed to be appropriate to gain a out performance payment for meeting our statutory obligations. However for 2017/18 the index score is in penalty. The mean zonal compliance penalty isn't applicable because the larger WQSI penalty applies. As the index score is below the penalty cap the capped penalty has been applied. The penalty is therefore determined as = (Penalty deadband – Penalty cap)*penalty incentive rate

Penalty = (145.9-141.2) x -0.77 = £3.619 million.

Performance commitment B2 - Reliable Water Service Index

Derivation of top level index score

The overall index score for this measure is calculated by multiplying the actual performance by the weighting for each sub measure, summing the results and adding a constant (134.147).

2015/16 calculations

The derivation of the 2015/16 16.447 index score is set out below. The actual performance is multiplied by the weighting for each of the sub measures.

Performance targets	Sub measure incentive contribution	Target Performance 2015/16	Actual Performance 2015/16	Weighting	Actual performance 2015/16 x weighting
Total bursts	Penalty only	5080	4785	-0.002022	-9.674387565
Interruptions greater than 12 hours	Penalty and	730	11431	-0.007902	-90.32796146
Poor pressure	Penalty and	272	262	-0.008468	-2.21870443
No. unwanted customer contacts for water availability (per year)	Penalty and	48,000	47,011	-0.000329	-15.47840593

Weighted sum	-117.6994594
Constant	134.147
Weighted sum plus constant (i.e. Index score)	16.447

Derivation of the 2015/16 out performance or penalty

The calculation of the penalty and the out performance payment for this measure are determined on a different basis.

The size of any penalty associated with the RWSI is determined by the under performance of all four sub measures. The size of any out performance payment is however based upon the out performance of the interruptions, poor pressure and unwanted contacts sub measures only.

As the index score of 16.447 is in penalty all four measures are used in the index score for calculating the penalty.

As the index score is also below the penalty cap the capped penalty has been applied. The penalty is therefore determined as = (Penalty deadband – Penalty cap)*penalty incentive rate

Penalty = (95 – 94) x 7.974 = £7.974 million.

2016/17 calculations

The derivation of the 2016/17 77.840 index score is set out below. The actual performance is multiplied by the weighting for each of the sub measures.

Performance targets	Sub measure incentive contribution	Target Performance 2016/17	Actual Performance 2016/17	Weighting	Actual performance 2016/17 x weighting
Total bursts	Penalty only	5080	4590	-0.002022	-9.280133526
Interruptions greater than 12 hours	Penalty and reward	730	3759	-0.007902	-29.70368359
Poor pressure	Penalty and reward	272	345	-0.008468	-2.921576445
No. unwanted customer contacts for water availability (per year)	Penalty and reward	48,000	43740	-0.000329	-14.4014268

Weighted sum	-56.30682036
Constant	134.147
Weighted sum plus constant (i.e. Index score)	77.840

Derivation of the out performance or penalty

The calculation of the penalty and the out performance payment for this measure are determined on a different basis.

The size of any penalty associated with the RWSI is determined by the under performance of all four sub measures. The size of any out performance payment is however based upon the out performance of the interruptions, poor pressure and unwanted contacts sub measures only.

As the index score of 70.827 is in penalty all four measures are used in the index score for calculating the penalty.

As the index score is also below the penalty cap the capped penalty has been applied. The penalty is therefore determined as = (Penalty deadband – Penalty cap)*penalty incentive rate

Penalty = (95 – 94) x 7.974 = £7.974 million.

2017/18 calculations

The derivation of the 2017/18 70.827 index score is set out below. The actual performance is multiplied by the weighting for each of the sub measures.

Performance targets	Sub measure incentive contribution	Target Performance 2016/17	Actual Performance 2016/17	Weighting	Actual performance 2016/17 x weighting
Total bursts	Penalty only	5080	4484	-0.002022	-9.066648
Interruptions greater than 12 hours	Penalty and reward	730	4631	-0.007902	-36.594162
Poor pressure	Penalty and reward	272	278	-0.008468	-2.354104
No. unwanted customer contacts for water availability (per year)	Penalty and reward	48,000	46,487	-0.000329	-15.305879
Weighted sum					-63.32014026
Constant					134.147
Weighted sum plus constant (i.e. Index score)					70.82657834

Derivation of the out performance or penalty

The calculation of the penalty and the out performance payment for this measure are determined on a different basis.

The size of any penalty associated with the RWSI is determined by the under performance of all four sub measures. The size of any out performance payment is however based upon the out performance of the interruptions, poor pressure and unwanted contacts sub measures only.

As the index score of 70.827 is in penalty all four measures are used in the index score for calculating the penalty.

As the index score is also below the penalty cap the capped penalty has been applied. The penalty is therefore determined as = (Penalty deadband – Penalty cap)*penalty incentive rate

Penalty = (95 – 94) x 7.974 = £7.974 million.

Performance commitment S-A1 - Private sewers index

Index calculation

The index is calculated by multiplying the performance for each of the sub measures by its associated willingness to pay (WTP) figure. Each of the resulting figures is then summed together and the total divided by the summed FY14 total performance (1,315,538). The result of this is multiplied by 100 to generate the index score.

2015/16 performance

Sub measure	Performance	WTP	Total
Sewer blockages	13,906	59.30	824,625.80
Sewer collapses / rising main bursts	361	97.10	35,053.10
Pollution incidents (Ww infra)	5	1516.30	7,581.50
Sewer flooding (internal)	418	297.50	124,355.00
Sewer flooding (external)	4,605	46.6	214,593.00
		Total	1,206,208.40
		Constant	$(1,206,208.40/1,315,538) \times 100$
		Weighted sum plus constant (i.e. Index score)	91.69

Derivation of the out performance or penalty

This measure is in out performance payment for 2015/16. The out performance payment is calculated by assessing how many index points performance is below the out performance payments deadband (up to a maximum of 6.9 points) and multiplying the result by the incentive rate of £1.069 million per point. As shown in the table below our performance is below the out performance payments cap of 91.90, therefore this figure has been used to calculate the out performance payments not our actual performance of 91.69.

PC 2015/16	100.00
2015/16 performance	91.69
Reward dead band	98.80
Reward cap	91.90
Incentive rate	£1.069m
Reward calculation	$(98.8-91.90) \times £1.069$
Reward	£7.38m

2016/17 performance

Sub measure	Performance	WTP	Total
Sewer blockages	14,031	59.30	832,038.30
Sewer collapses / rising main bursts	391	97.10	37,966.10
Pollution incidents (Ww infra)	1	1,516.30	1,516.30
Sewer flooding (internal)	415	297.50	123,462.50
Sewer flooding (external)	4,599	46.6	214,313.40
		Total	1,209,296.60
		Constant	$(1,209,296.60/1,315,538) \times 100$
		Weighted sum plus constant (i.e. Index score)	91.92

Derivation of out performance payment or penalty

This measure is in out performance payment for 2016/17. The out performance payment is calculated by assessing how many index points performance is below the out performance payments deadband (up to a maximum of 6.9 points) and multiplying the result by the incentive rate of £1.069 million per point. As shown in the table below our performance is below the reward cap of 91.90, therefore this figure has been used to calculate the out performance payment not our actual performance of 91.69.

PC 2016/17	100.00
2016/17 performance	91.92
Reward dead band	98.80
Reward cap	91.90
Incentive rate	£1.069m
Reward calculation	(98.8-91.92)* £1.069
Out performance payment	£7.35m

2017/18 performance

Sub measure	Performance	WTP	Total
Sewer blockages	13,809	59.30	81,8873.7
Sewer collapses / rising main bursts	302	97.10	29,324.2
Pollution incidents (Ww infra)	4	1,516.30	6,065.2
Sewer flooding (internal)	276	297.50	82,110
Sewer flooding (external)	3,901	46.6	181,786.6
		Total	1,118,160
		Constant	(1,118,160 / 1,315,538) x 100
		Weighted sum plus constant (i.e. Index score)	85.0

Derivation of out performance payment or penalty

This measure is in out performance payment for 2017/18. The out performance payment is calculated by assessing how many index points performance is below the out performance payment deadband (up to a maximum of 6.9 points) and multiplying the result by the incentive rate of £1.069 million per point. As shown in the table below our performance is below the out performance payments cap of 91.90, therefore this figure has been used to calculate the out performance payment not our actual performance of 85.0.

PC 2017/18	100.00
2017/18 performance	85.0
Reward dead band	98.8
Reward cap	91.9
Incentive rate	£1.069m
Reward calculation	(98.8-91.9)* £1.069
Out performance payment	£7.376m

Performance commitment S-A2 Wastewater network performance index

Index calculation

The index is calculated by multiplying the performance for each of the sub measures by its associated WTP figure. The resulting figures are then summed together and the total divided by the summed total of the FY14 performance (288,266). The result of this is multiplied by 100 to generate the index score.

2015/16 performance

Sub measure	Performance	WTP	Total
Sewer blockages	7,473	26.1	195,045.30
Sewer collapses / rising main bursts	261	97.1	25,343.10
Sewer collapses / rising main bursts	51	485.2	24,745.20
Equipment failures (ww infra)	2,704	6.3	17,035.20
		Total	262,168.80
		Constant	(262,168.80/288,266)*100
		Weighted sum divided by constant (i.e. Index score)	90.95

Derivation of out performance payment or penalty

This measure is below our performance commitment of 106.2, however as it is incentivised through a penalty only mechanism, no out performance payment is to be applied.

2016/17 performance

Sub measure	Performance	WTP	Total
Sewer blockages	7,469	26.1	194,940.90
Sewer collapses / rising main bursts	268	97.1	26,022.80
Sewer collapses / rising main bursts	46	485.2	22,319.20
Equipment failures (ww infra)	2,322	6.3	14,628.60
		Total	257,911.50
		Constant	(257,911.50/288,266)*100
		Weighted sum divided by constant (i.e. Index score)	89.47

Derivation of out performance payment or penalty

This measure is below our performance commitment of 103.2, however as it is incentivised through a penalty only mechanism, no out performance payment is to be applied.

2017/18 performance

Sub measure	Performance	WTP	Total
Sewer blockages	7,047	26.1	22,527.20
Sewer collapses / rising main bursts	232	97.1	183,926.70
Sewer collapses / rising main bursts	47	485.2	19,139.40
Equipment failures (ww infra)	3,038	6.3	248,397.70
		Total	22,527.20
		Constant	$(257,527.2/288,266)*100$
		Weighted sum divided by constant (i.e. Index score)	86.17

Derivation of out performance payment or penalty

This measure is below our performance commitment of 99.4, however as it is incentivised through a penalty only mechanism, no out performance payment is to be applied.

Performance commitment S-B2 Sewer flooding index

Index calculation

The index is calculated by multiplying the performance for each of the sub measures by its associated WTP figure. Each of the resulting figures is then summed together and the total divided by the summed total FY14 performance (258,753). The result of this is multiplied by 100 to generate the index score.

2015/16 performance

Sub measure	Performance	WTP	Total
Properties flooded due to other causes	839	117.1	98,246.9
Properties flooded due to hydraulic overload	147	117.1	17,213.7
Areas flooded due to other causes	3,391	26.3	89,183.3
Areas flooded due to hydraulic overload	455	26.3	11,966.5
Incidents of repeat flooding	377	117.1	44,146.7
		Total	260,757.10
		Constant	(260,757.10/258,753)*100
		Weighted sum divided by constant (i.e. Index score)	100.77

Derivation of out performance payment or penalty

This measure is above our performance commitment of 93.1, however it is below the penalty deadband of 103.7 therefore no penalty is to be applied.

2016/17 Performance

Sub measure	Performance	WTP	Total
Properties flooded due to other causes	794	117.1	92,977.40
Properties flooded due to hydraulic overload	147	117.1	17,213.70
Areas flooded due to other causes	3,274	26.3	86,106.20
Areas flooded due to hydraulic overload	215	26.3	5,654.50
Incidents of repeat flooding	362	117.1	42,390.20
		Total	244,342.00
		Constant	(244,342.00/258,753)*100
		Weighted sum divided by constant (i.e. Index score)	94.43

Derivation of out performance payment or penalty

This measure is in penalty for 2016/17. The penalty is calculated by assessing how many index points performance is above the penalty deadband (up to a maximum of 10.4 points) and multiplying the result by the incentive rate of £2.032 million per point.

PC 2016/17	83.9
2017/18 performance	94.43
Penalty dead band	93.7
Penalty collar	104.1
Incentive rate	£2.032m
Penalty calculation	$(94.43-93.7) * £2.032$
Penalty	£1.484m

2017/18 Performance

Sub measure	Performance	WTP	Total
Properties flooded due to other causes	559	117.1	65,459
Properties flooded due to hydraulic overload	91	117.1	10,656
Areas flooded due to other causes	2,863	26.3	75,297
Areas flooded due to hydraulic overload	212	26.3	5,576
Incidents of repeat flooding	206	117.1	24,123
		Total	181,110.10
		Constant	$(181,110.10/258,753)*100$
		Weighted sum divided by constant (i.e. Index score)	69.99

Derivation of out performance payment or penalty

This measure is below our performance commitment of 73.9, however it is above the out performance payment deadband of 65.0 therefore no out performance payments is to be applied.

Performance commitment S-D2 Maintaining our WwTW

Index calculation

The index is calculated by summing the points each WwTW has accrued for its environmental performance in the year. The maximum potential points that a works in each size band can receive for each level of failure or risk is shown in the table below, with these values based upon an annual failure or being at that level of risk for the full 12 month period. The performance of each works can change month by month, with the score for each works being based upon the monthly performance, with the total score over the twelve months being assigned to the highest risk category for that works.

This year two works from size band 1-4 and three works from size band 6a have been classified as a failing works.

A more detailed description of this methodology can be found in our definition documents which can be found at the following [link](#).

Maximum annual risk points

Risk status	Size band	Index points
Failed works	Size band 1-4	4.0967
	Size band 5	8.1934
	Size band 6a	16.3867
	Size band 6b	40.9668
High risk	Size band 1-4	0.0819
	Size band 5	0.1639
	Size band 6	0.8193
Medium risk	Size band 1-4	0.0410
	Size band 5	0.0819
	Size band 6	0.4097

2015/16 performance

Risk status	Performance	Number of works
WwTWs failing EA permit - small (size band 1-4)	0.0000	0
WwTWs failing EA permit - medium (size band 5)	16.3868	2
WwTWs failing EA permit - large (size band 6a & 6b)	73.8768	3
WwTWs at high risk of failing EA permit - small (size band 1-4)	0.0376	2
WwTWs at high risk of failing EA permit - medium (size band 5)	0.0000	0
WwTWs at high risk of failing EA permit - large (size band 6)	0.1365	2
WwTWs at medium risk of failing EA permit - small (size band 1-4)	0.3713	65
WwTWs at medium risk of failing EA permit - medium (size band 5)	0.0272	4
WwTWs at medium risk of failing EA permit - large (size band 6)	0.6485	11
Total points	91.4847	87

Performance commitment S-D2 Maintaining our WwTW

Index calculation

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2015/16 performance

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WwTWs at medium risk of failing EA permit - medium (size band 5)	0.0272	4
WwTWs at medium risk of failing EA permit - large (size band 6)	0.6485	11
Total points	91.4847	87

Incentive calculation

The measure is below our performance commitment of 83, however this measure is penalty only therefore no out performance payment is applied.